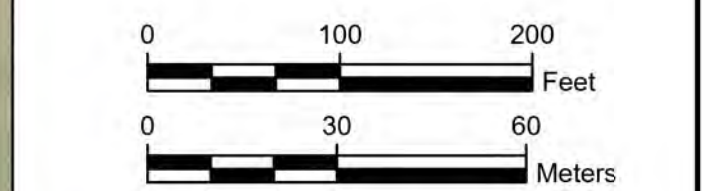


- LEGEND:**
- ×— ODOT Limited Access Highway Fence
  - Field Delineated Wetland (PEM)
  - Desktop Determined – OPSB Approved Waiver Request Area
  - Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

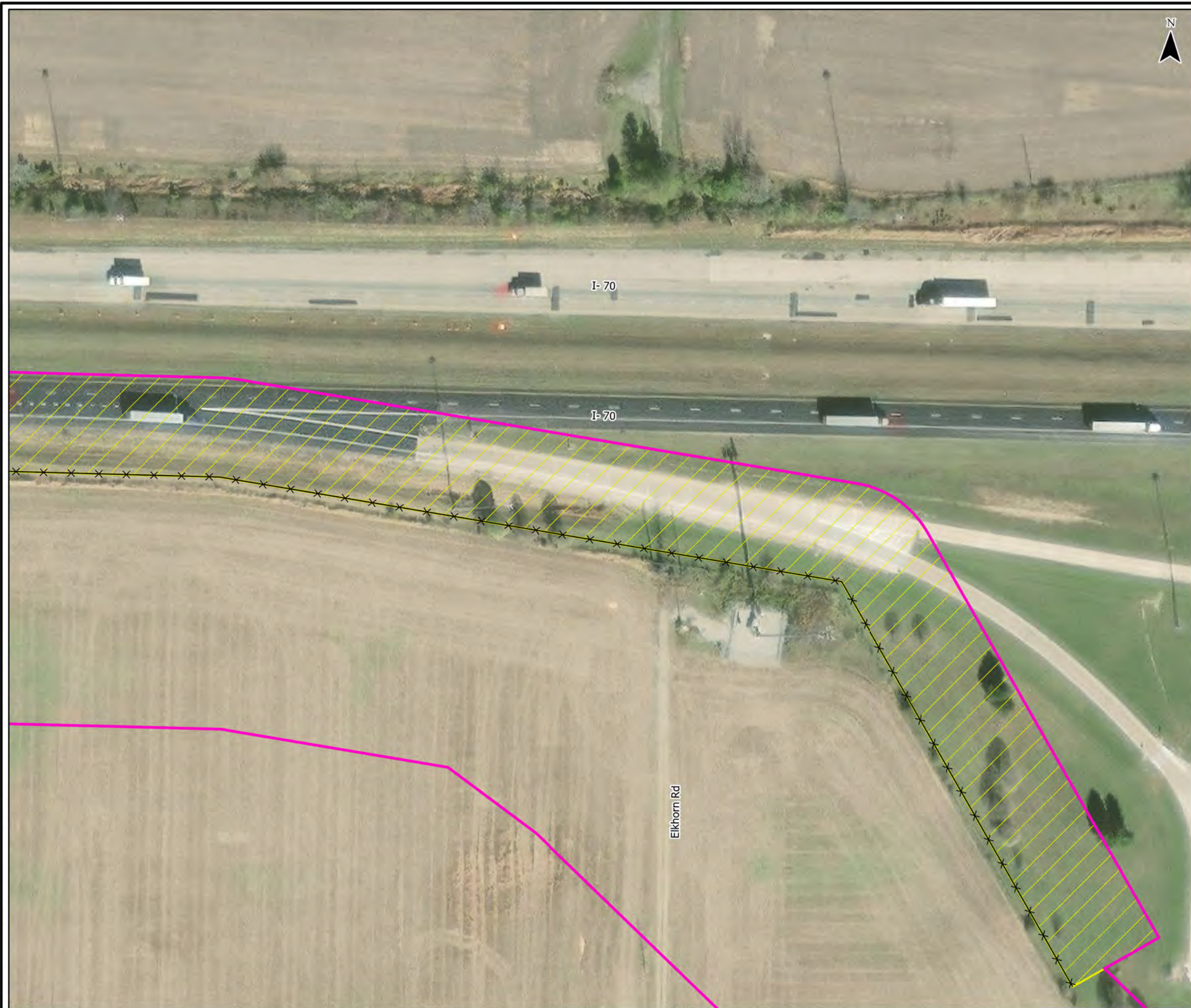
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**

aes Ohio ARCADIS **FIGURE 4.71**

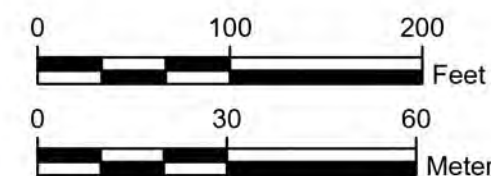


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**LEGEND:**

- ✕— ODOT Limited Access Highway Fence
- ▨ Desktop Determined – OPSB Approved Waiver Request Area
- ▭ Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

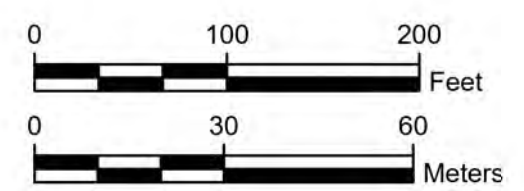
**DELINEATED FEATURES**



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- LEGEND:**
- ✕— ODOT Limited Access Highway Fence
  - ▨ Desktop Determined – OPSB Approved Waiver Request Area
  - ▭ Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

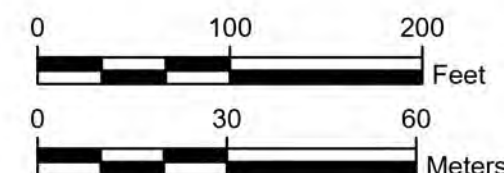
**DELINEATED FEATURES**

**FIGURE 4.73**





- LEGEND:**
- × ODOT Limited Access Highway Fence
  - Yellow hatched area Desktop Determined – OPSB Approved Waiver Request Area
  - Pink line Environmental Survey Area (ESA)



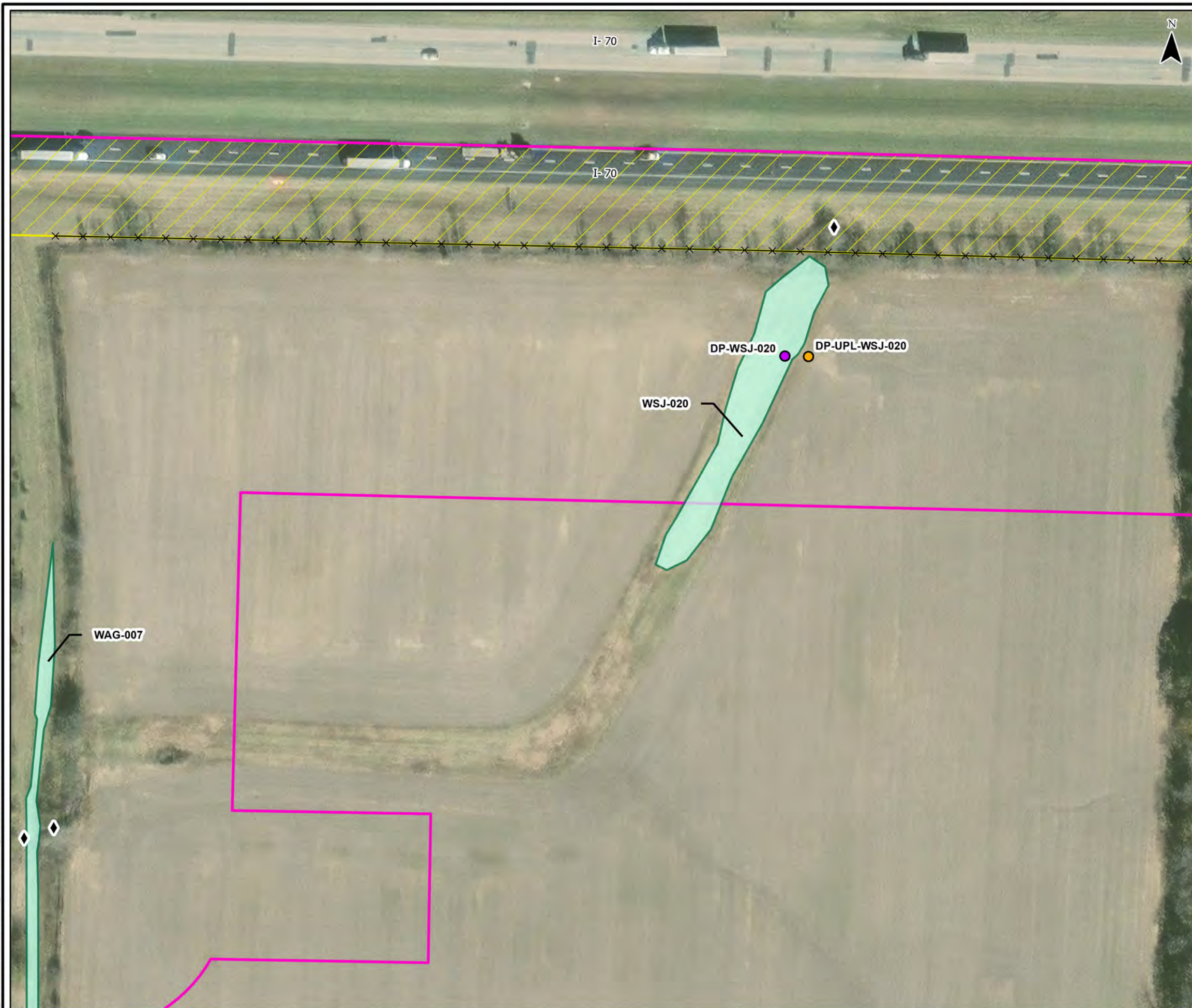
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

### DELINEATED FEATURES

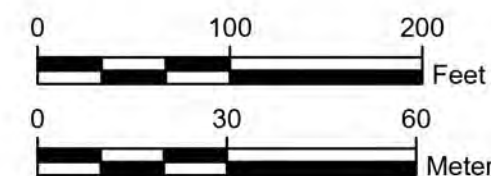


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**LEGEND:**

- ◆ Culvert
- Upland Data Point
- Wetland Data Point
- ×— ODOT Limited Access Highway Fence
- Field Delineated Wetland (PEM)
- Desktop Determined – OPSB Approved Waiver Request Area
- Environmental Survey Area (ESA)

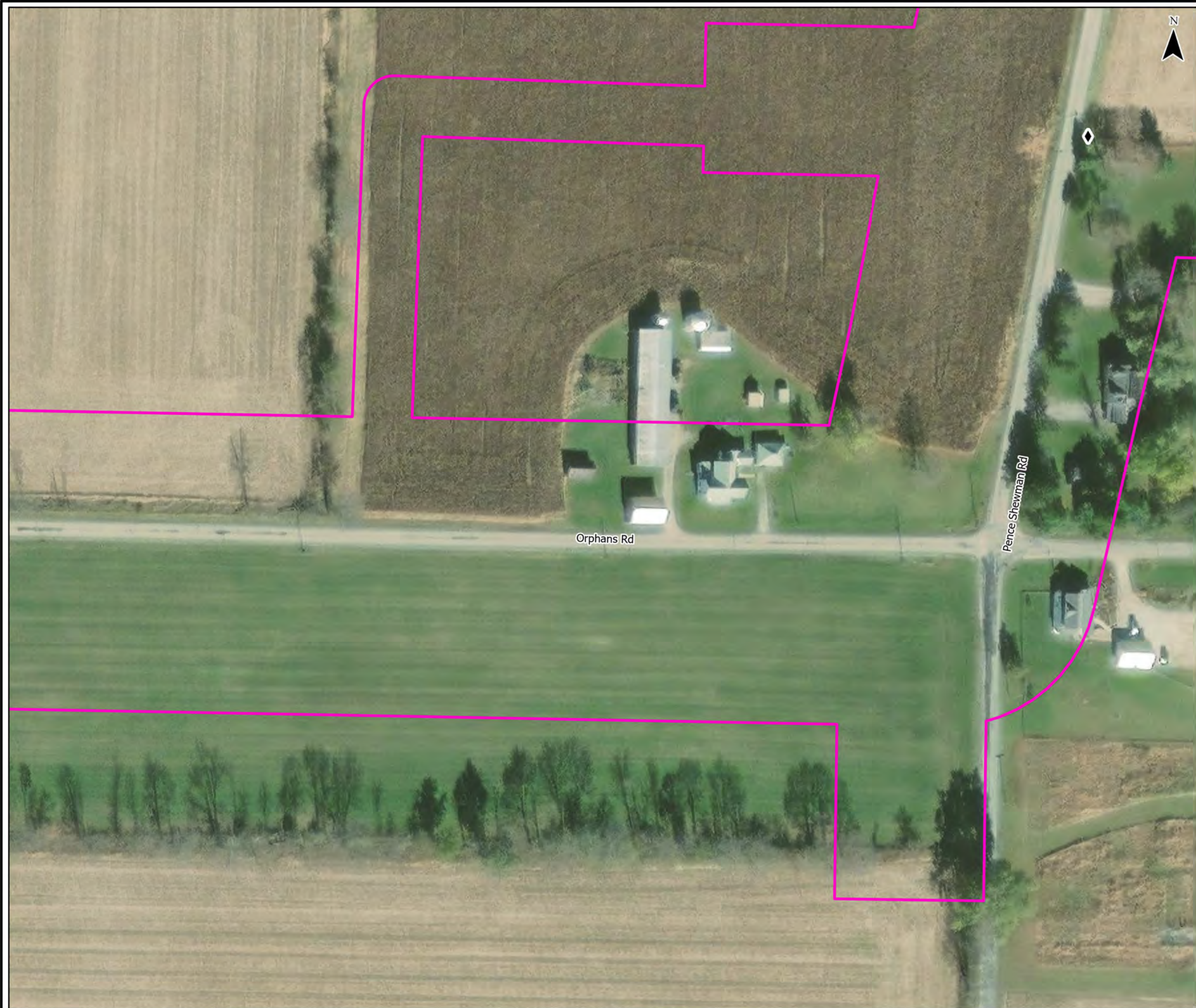


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

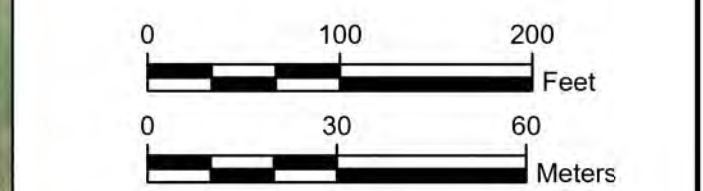
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**





- LEGEND:**
- ◆ Culvert
  - Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

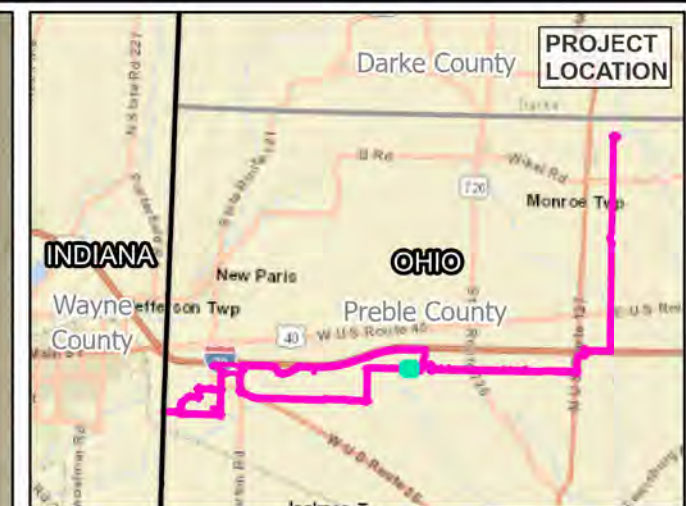
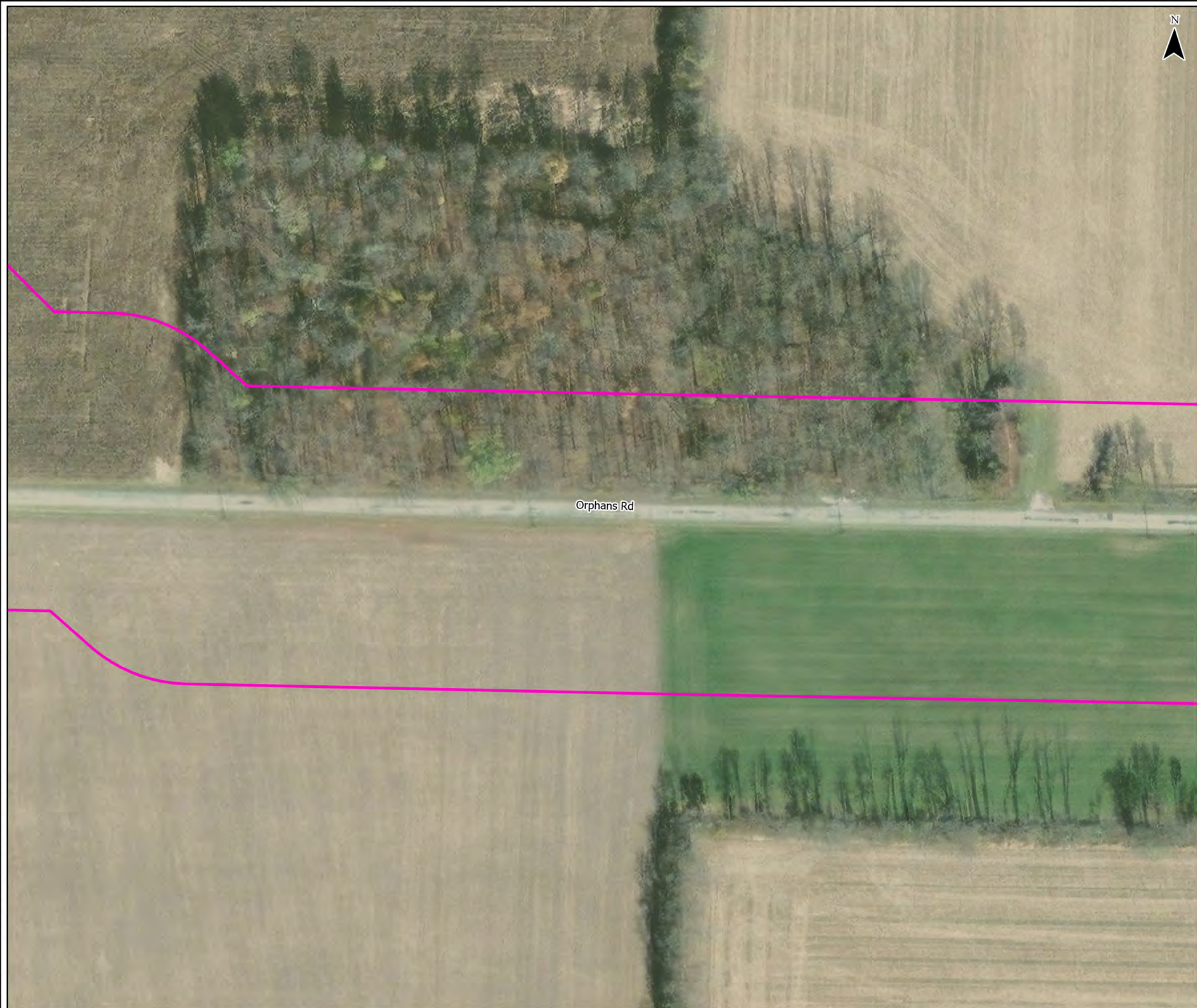
DELINEATED FEATURES


aes Ohio

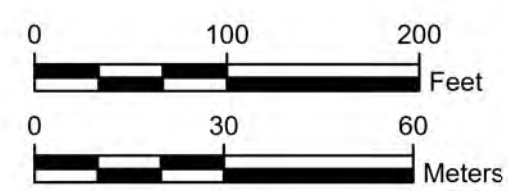
ARCADIS

FIGURE  
4.76





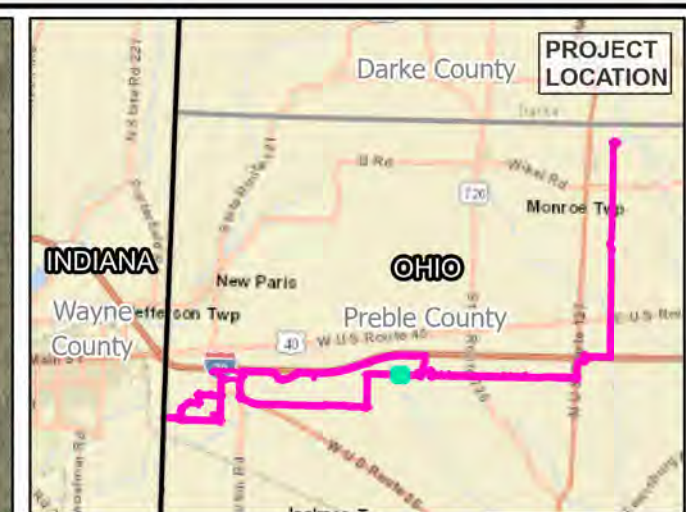
**LEGEND:**  
 Environmental Survey Area (ESA)




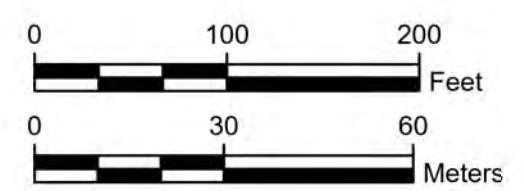
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
 <b>aes Ohio</b>	 <b>ARCADIS</b>
<b>FIGURE 4.77</b>	





**LEGEND:**  
 Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

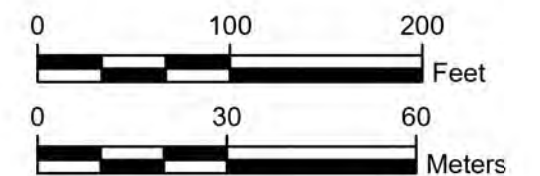
WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
 <b>aes Ohio</b>	 <b>ARCADIS</b>
<b>FIGURE 4.78</b>	





**LEGEND:**

- ◆ Culvert
- Open Ended Line
- Field Delineated Stream (Perennial)
- Field Delineated Pond
- Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

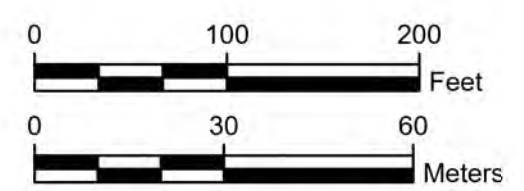
**DELINEATED FEATURES**





**LEGEND:**

- Field Delineated Pond
- Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

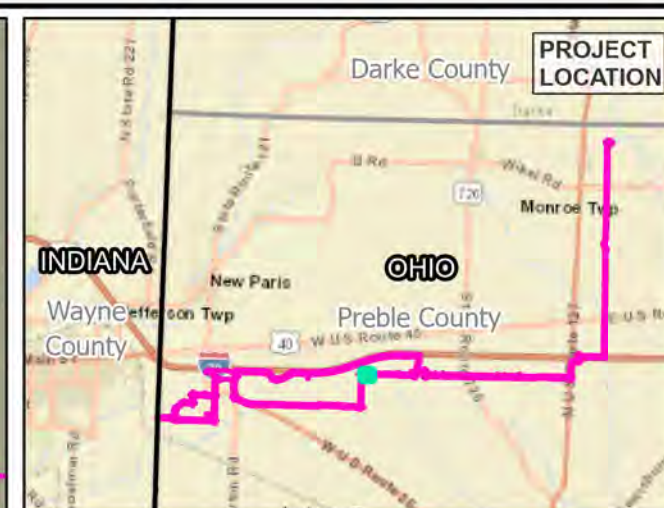
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**

**FIGURE 4.80**

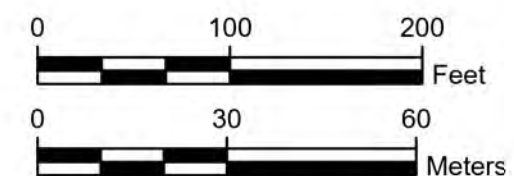
aes Ohio ARCADIS





**LEGEND:**

 Environmental Survey Area (ESA)

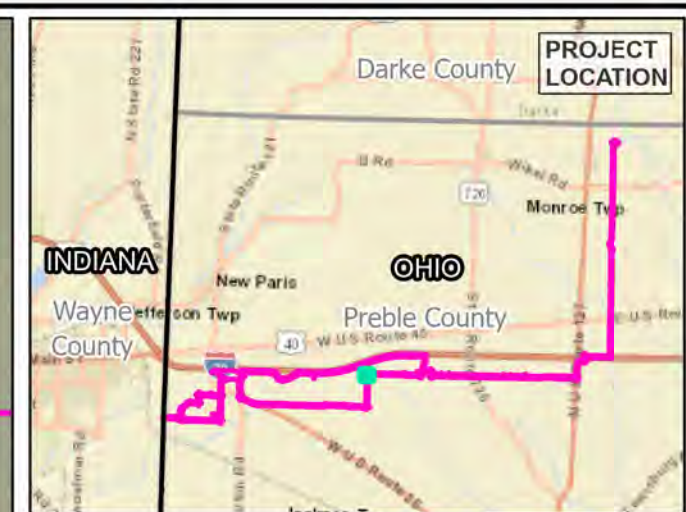
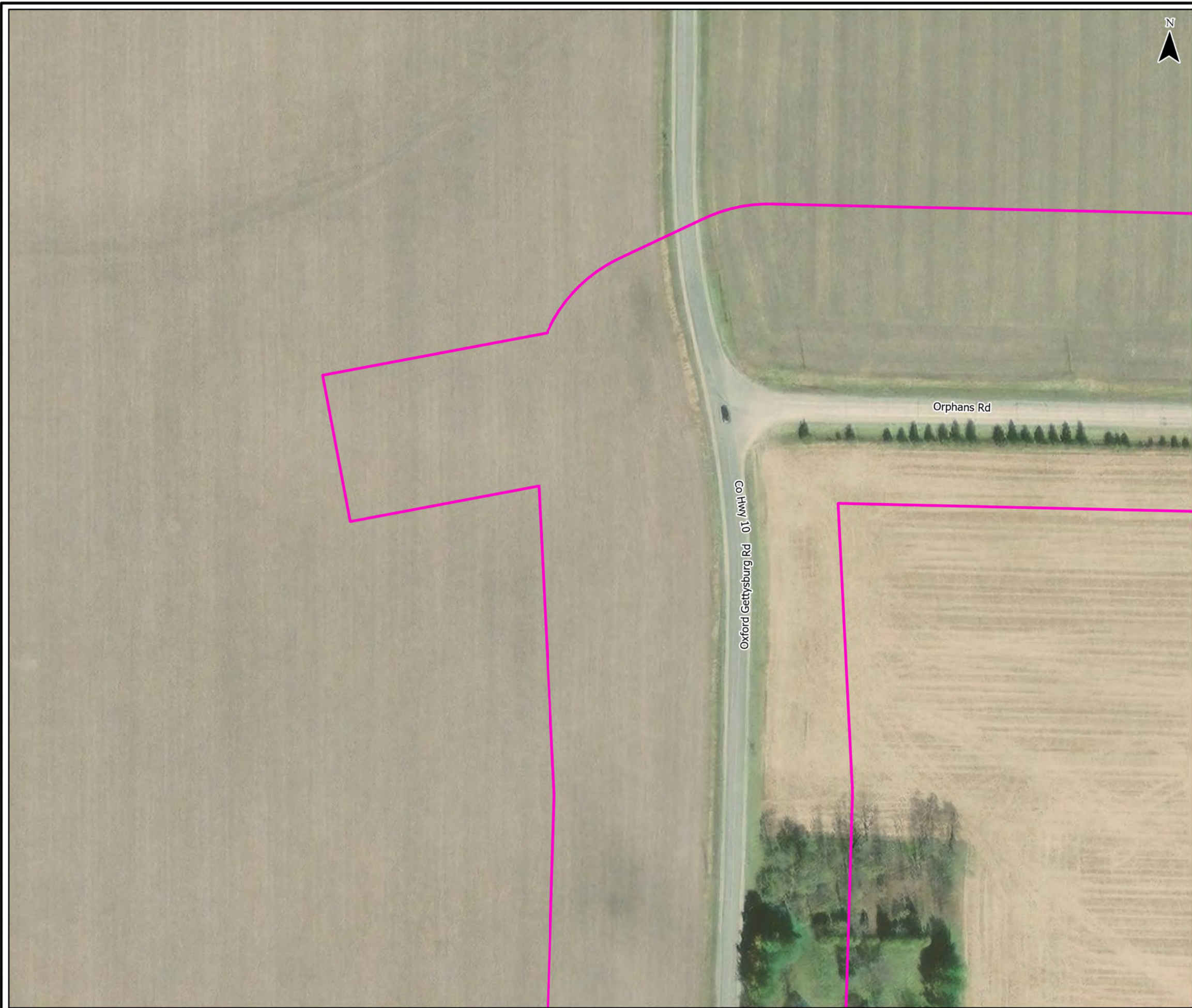


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

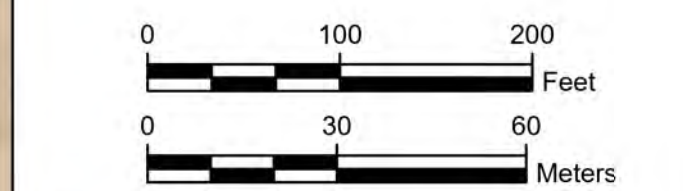
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**





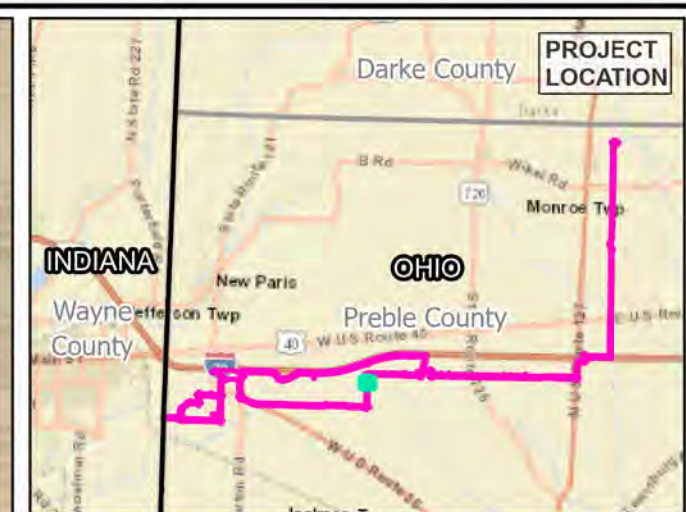
**LEGEND:**  
Environmental Survey Area (ESA)



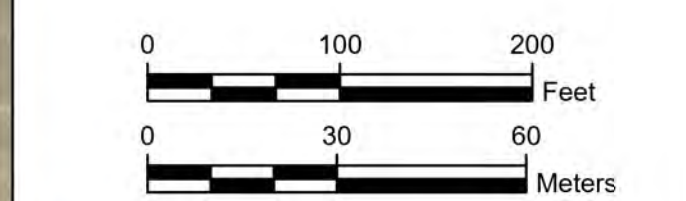
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE 4.82	





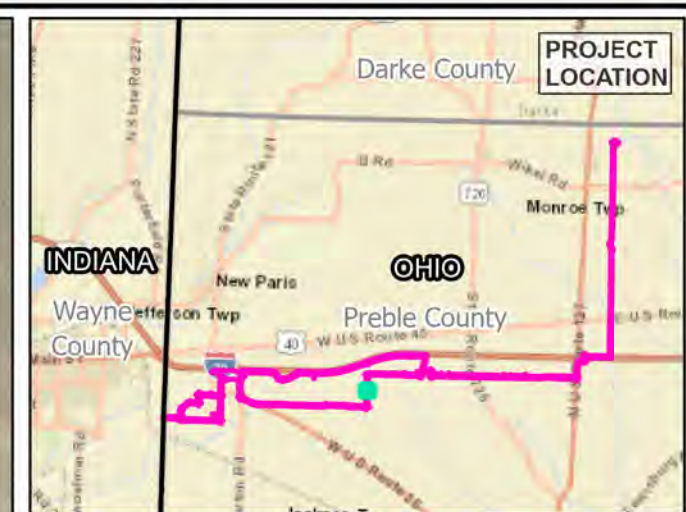
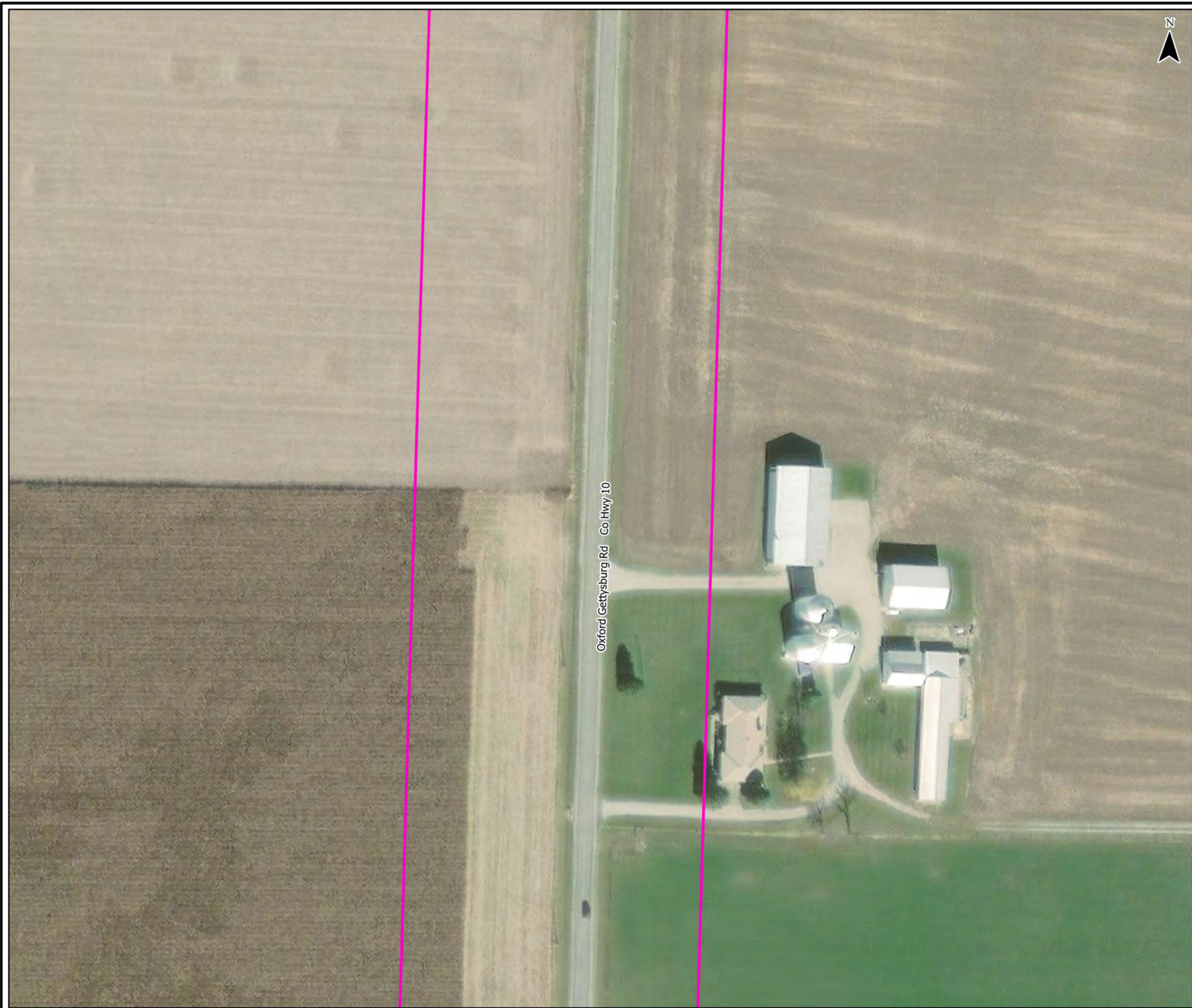
**LEGEND:**  
Environmental Survey Area (ESA)



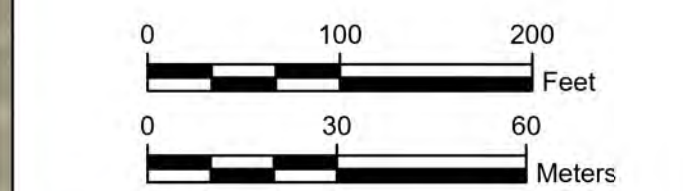
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE 4.83	





**LEGEND:**  
Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

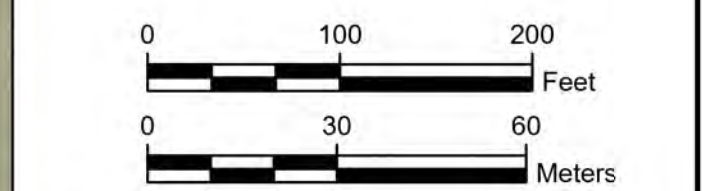
WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE <b>4.84</b>	





**LEGEND:**

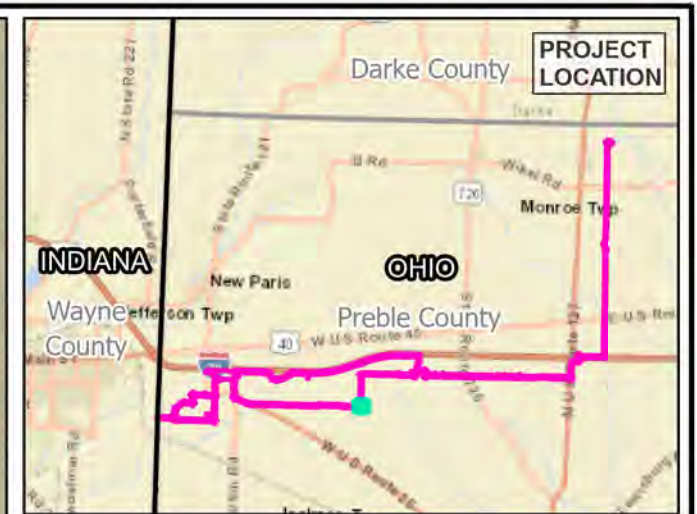
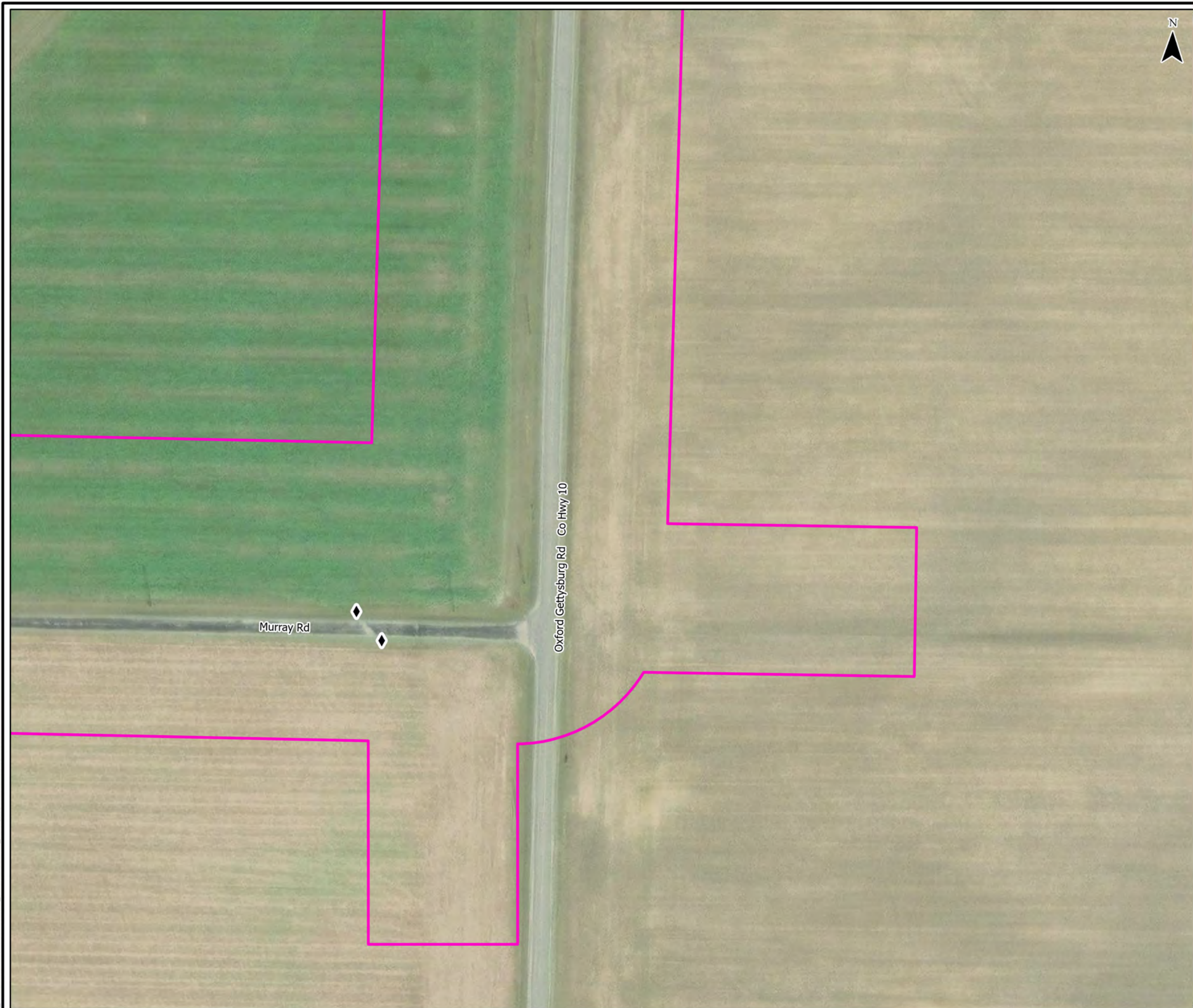
- ◆ Culvert
- Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

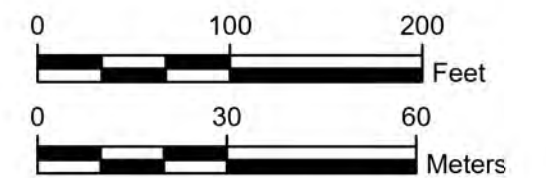
WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE <b>4.85</b>	





**LEGEND:**

- ◆ Culvert
- Environmental Survey Area (ESA)

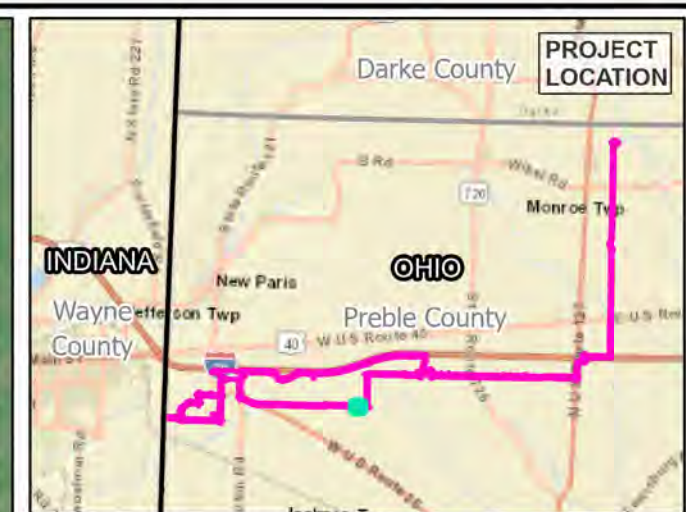


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

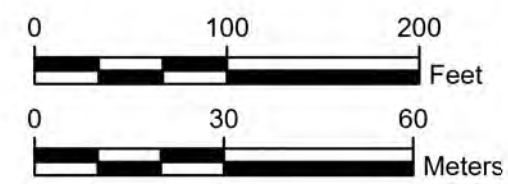
**DELINEATED FEATURES**





**LEGEND:**

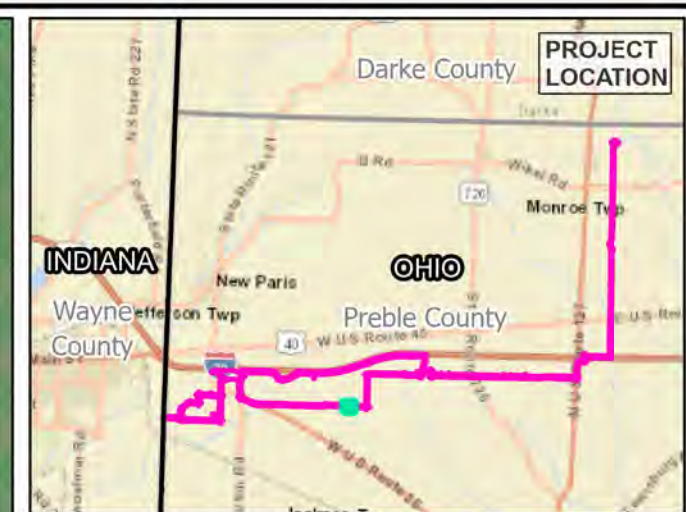
- ◆ Culvert
- Environmental Survey Area (ESA)



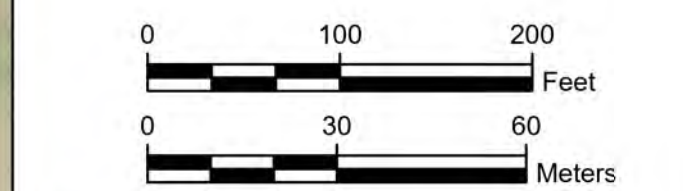
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE <b>4.87</b>	





**LEGEND:**  
Environmental Survey Area (ESA)

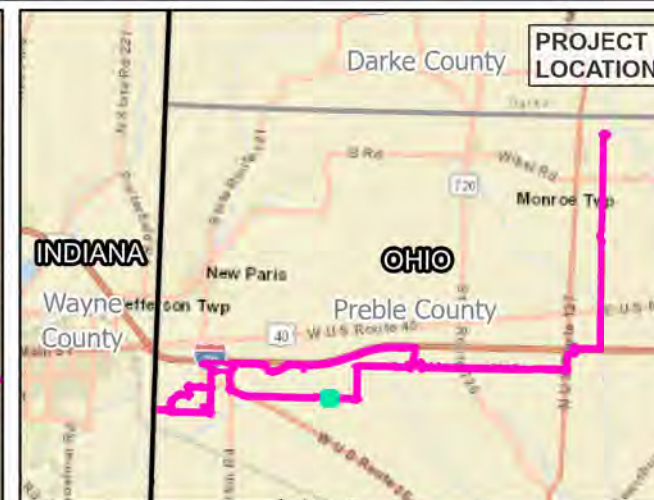


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE 4.88	

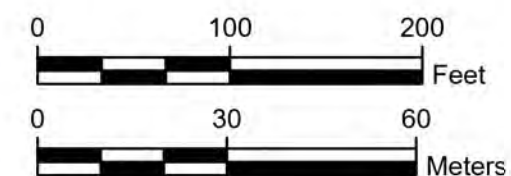


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**LEGEND:**

- ◆ Culvert
- Environmental Survey Area (ESA)

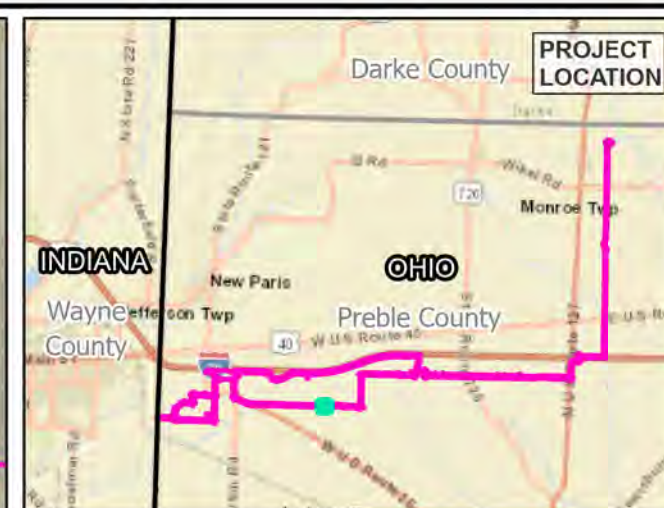


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

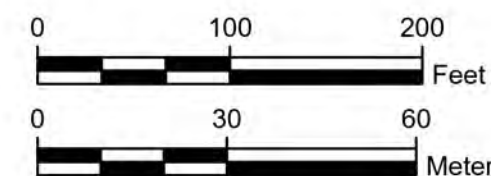
**DELINEATED FEATURES**





**LEGEND:**

- ◆ Culvert
- Upland Data Point
- Wetland Data Point
- Open Ended Line
- Field Delineated Wetland (PFO)
- Environmental Survey Area (ESA)

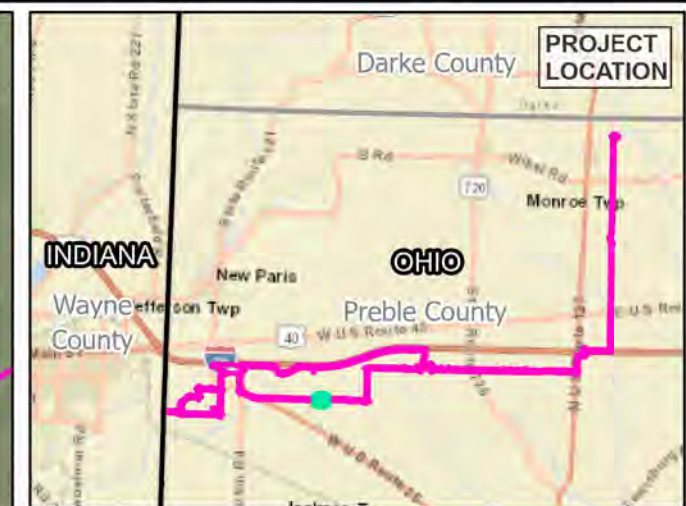


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

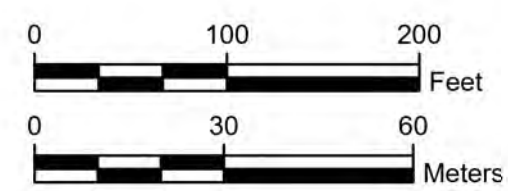
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**





- LEGEND:**
- ◆ Culvert
  - Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

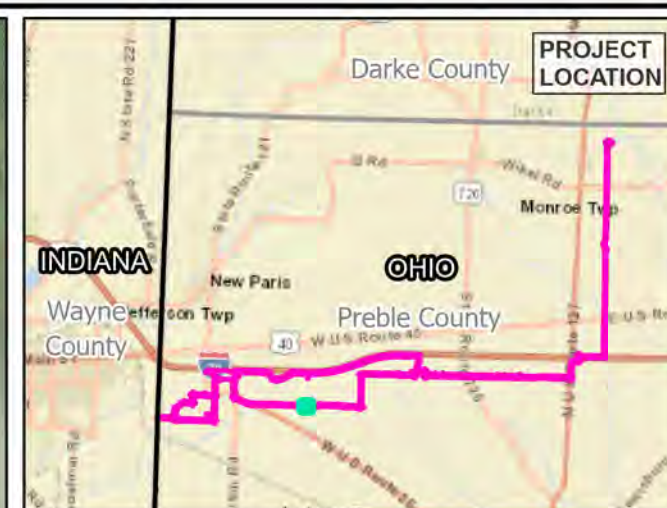
DELINEATED FEATURES

aes Ohio

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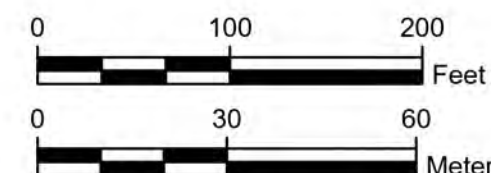
FIGURE  
4.91





**LEGEND:**

- ◆ Culvert
- Open Ended Line
- Field Delineated Stream (Ephemeral)
- Environmental Survey Area (ESA)

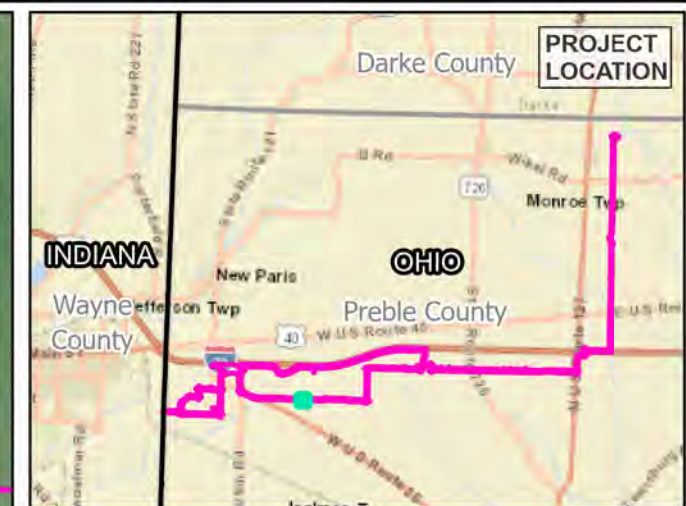


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

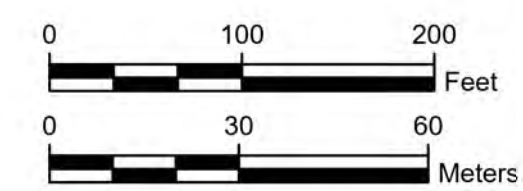
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**





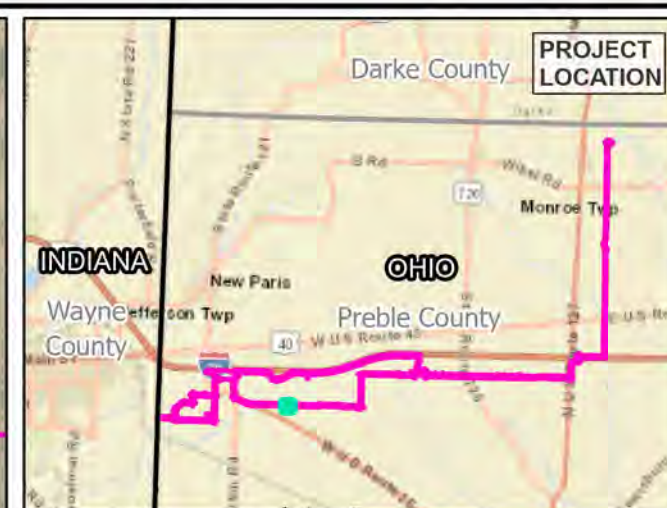
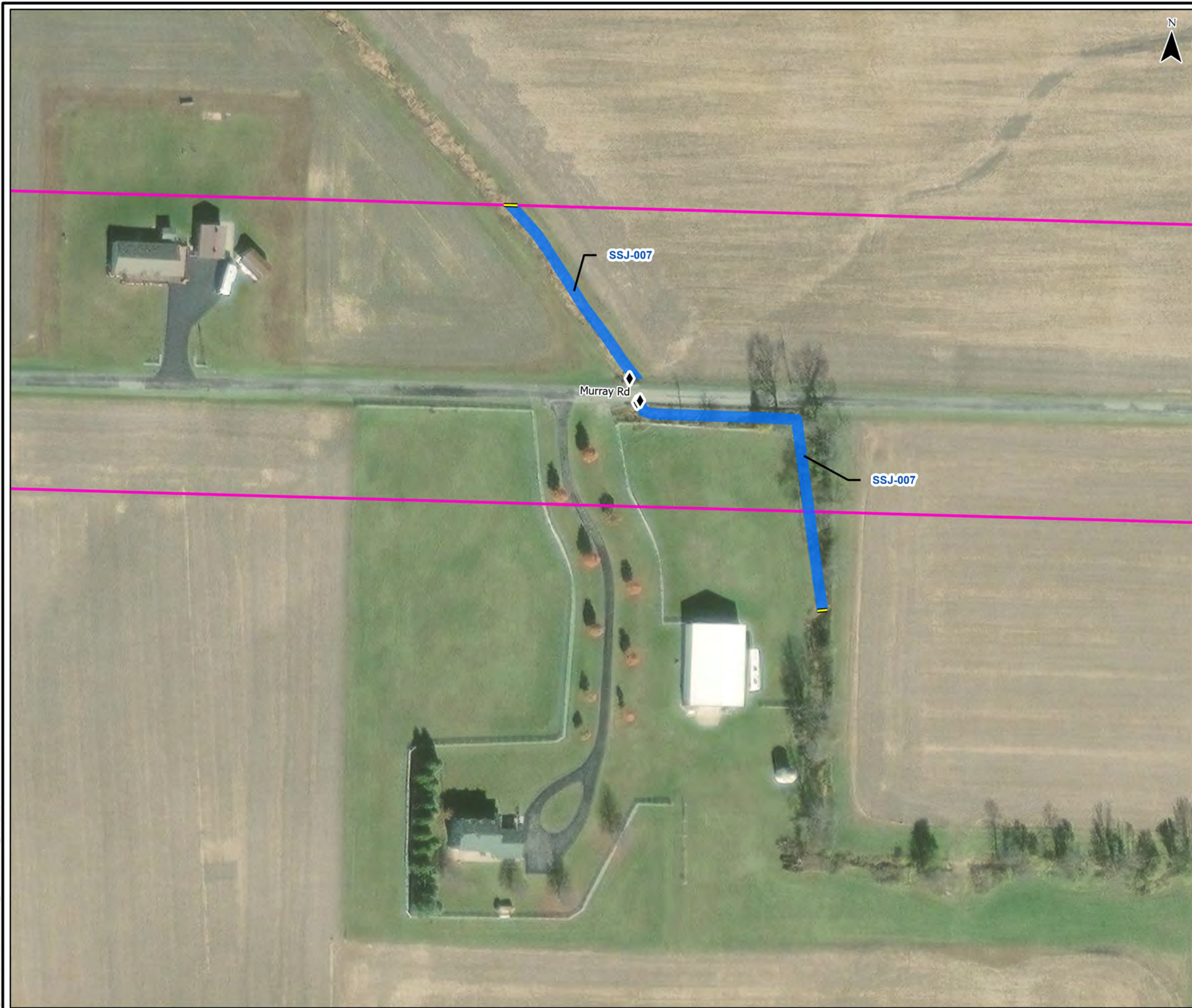
**LEGEND:**  
Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

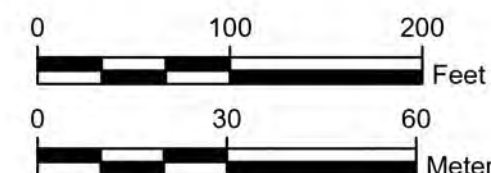
WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE 4.93	





**LEGEND:**

- ◆ Culvert
- Open Ended Line
- Field Delineated Stream (Perennial)
- Environmental Survey Area (ESA)

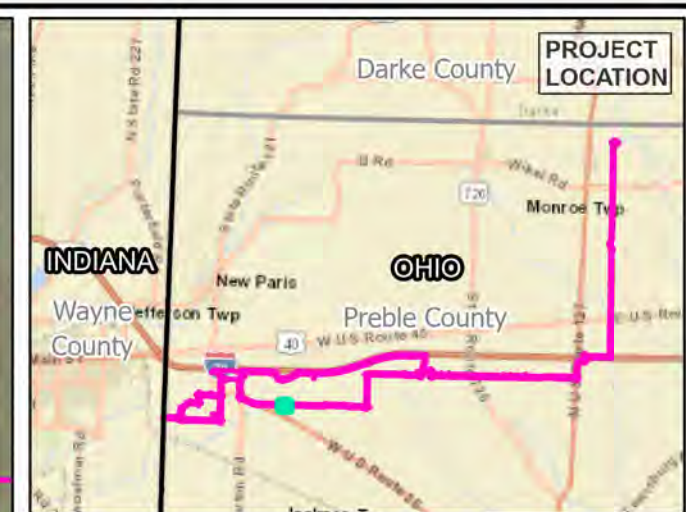


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

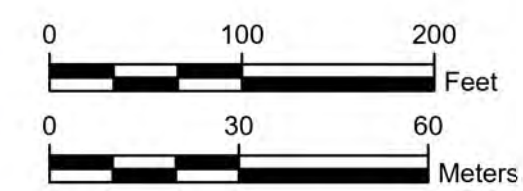
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**





**LEGEND:**  
Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

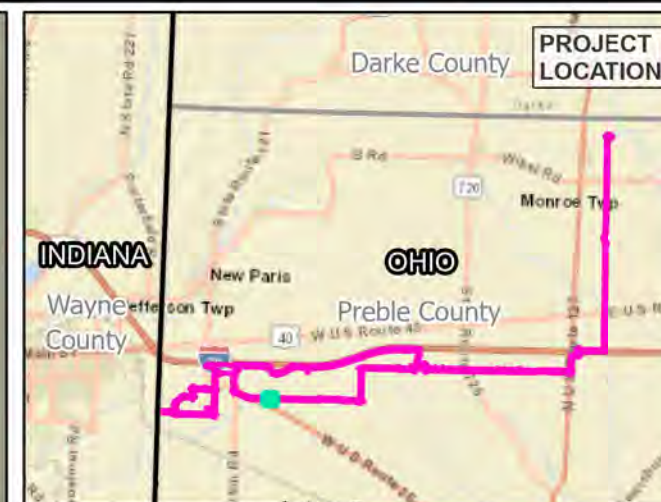
DELINEATED FEATURES

aes Ohio

ARCADIS

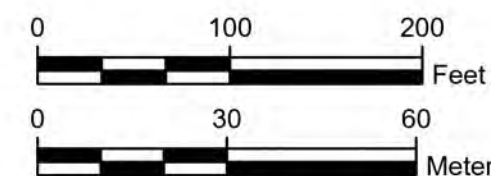
FIGURE  
4.95





**LEGEND:**

 Environmental Survey Area (ESA)

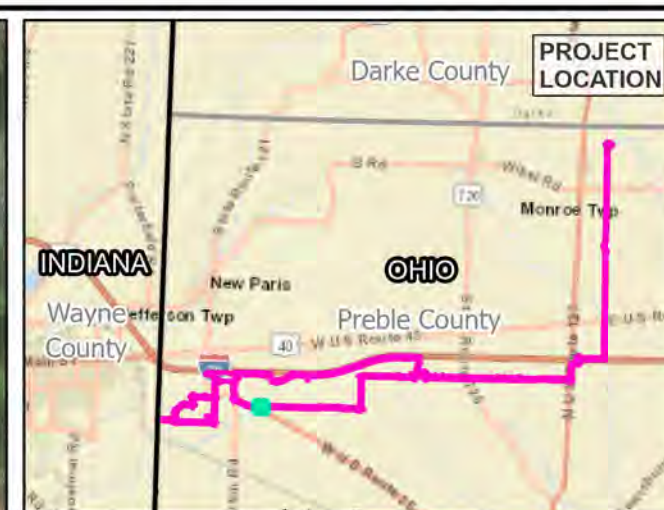


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

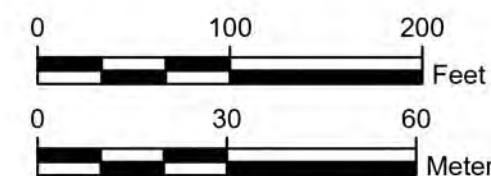
**DELINEATED FEATURES**





**LEGEND:**

- Open Ended Line
- Field Delineated Stream (Perennial)
- Environmental Survey Area (ESA)

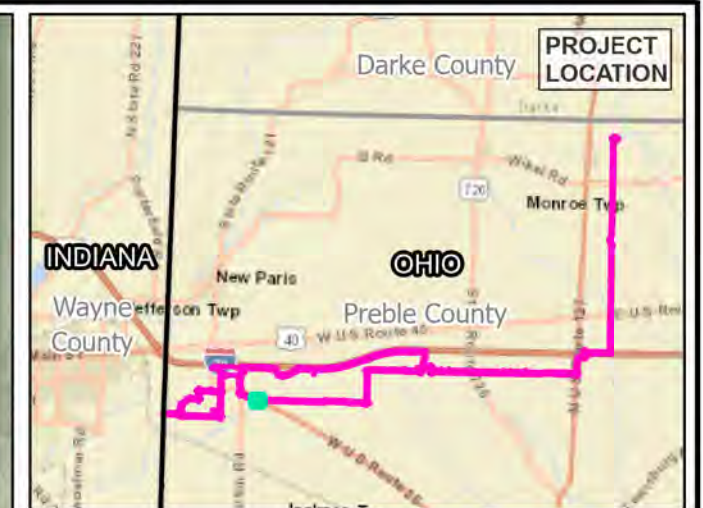


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

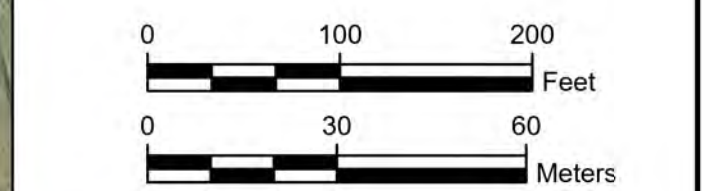
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**





**LEGEND:**  
Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

DELINEATED FEATURES

aes Ohio

ARCADIS

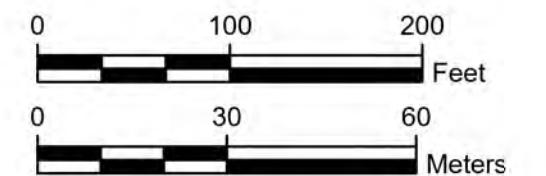
FIGURE  
4.98





**LEGEND:**

- ◆ Culvert
- Upland Data Point
- Wetland Data Point
- Field Delineated Wetland (PEM)
- Environmental Survey Area (ESA)

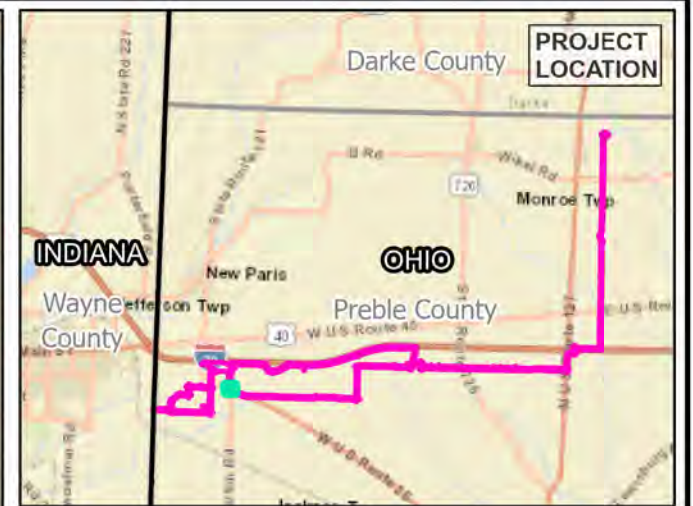
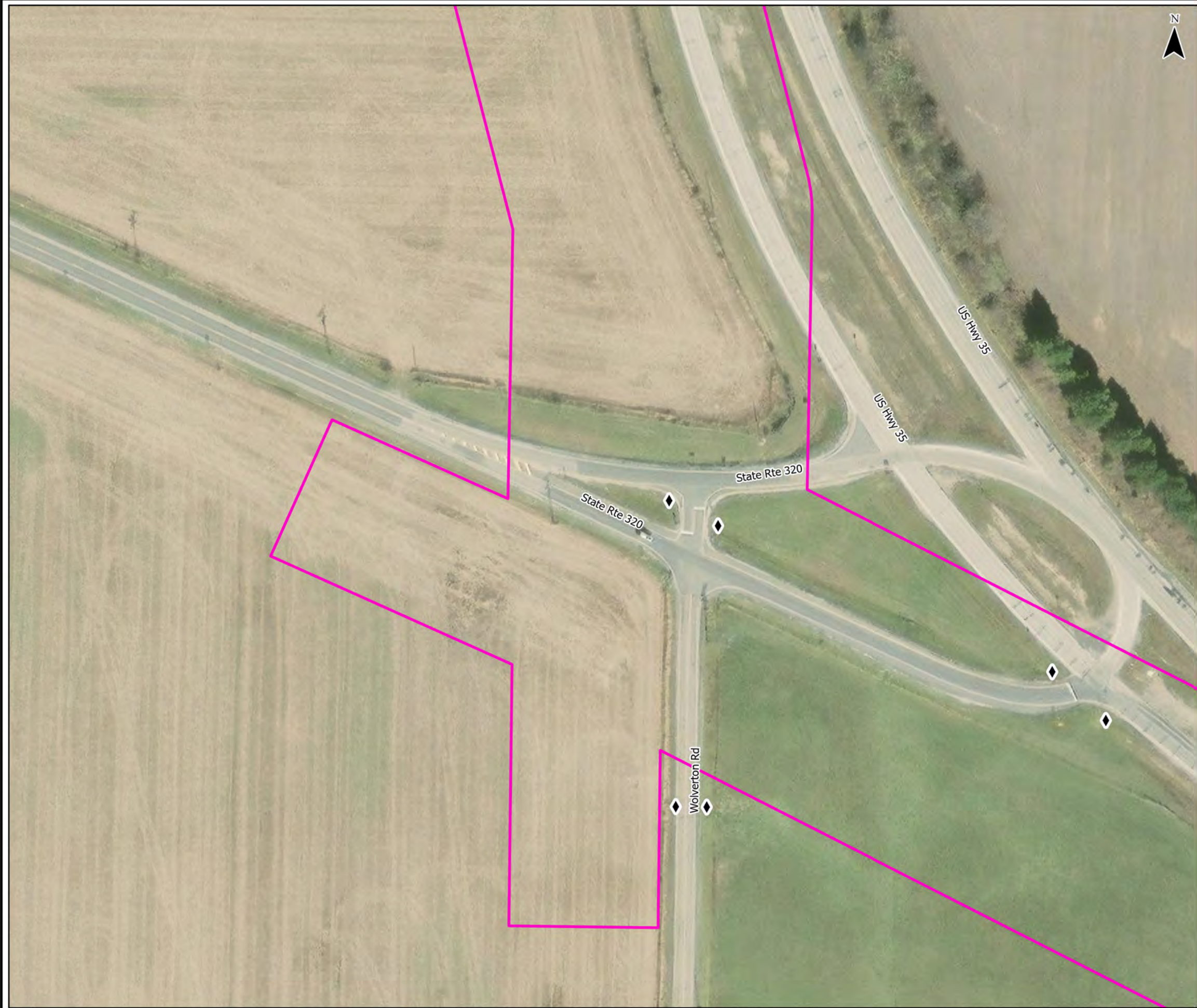


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

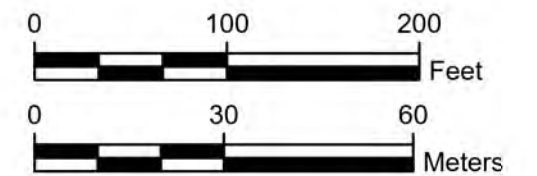
**DELINEATED FEATURES**





**LEGEND:**

- ◆ Culvert
- Environmental Survey Area (ESA)

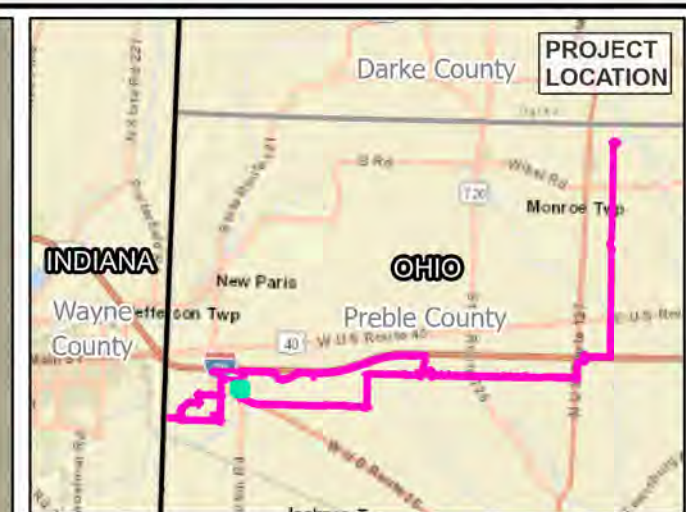
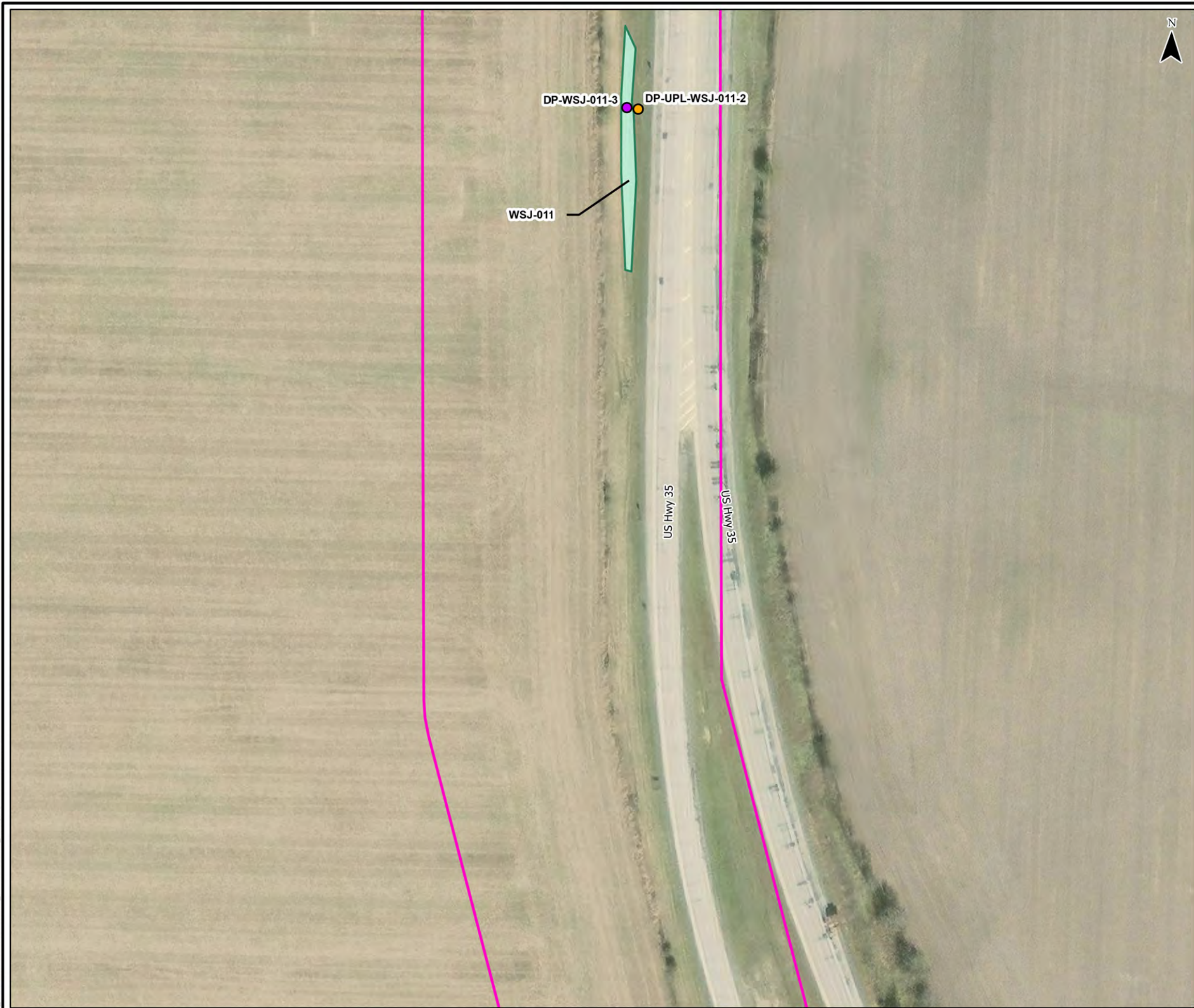


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

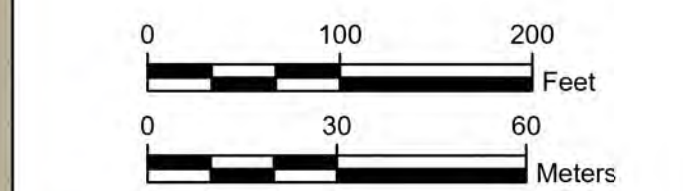
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**





- LEGEND:**
- Upland Data Point
  - Wetland Data Point
  - Field Delineated Wetland (PEM)
  - Environmental Survey Area (ESA)



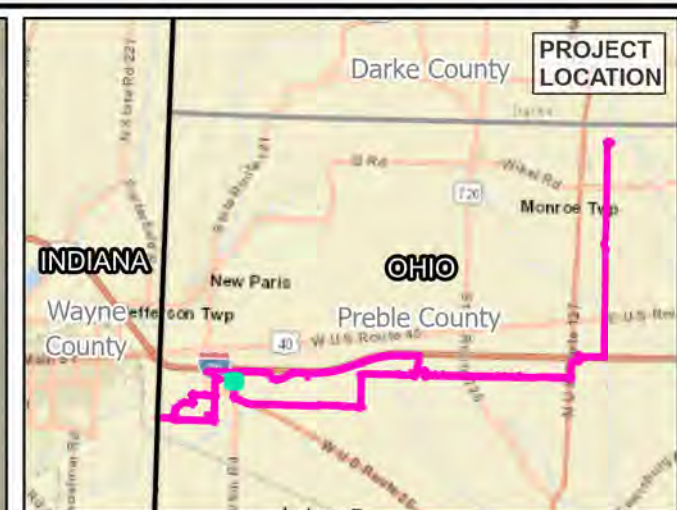
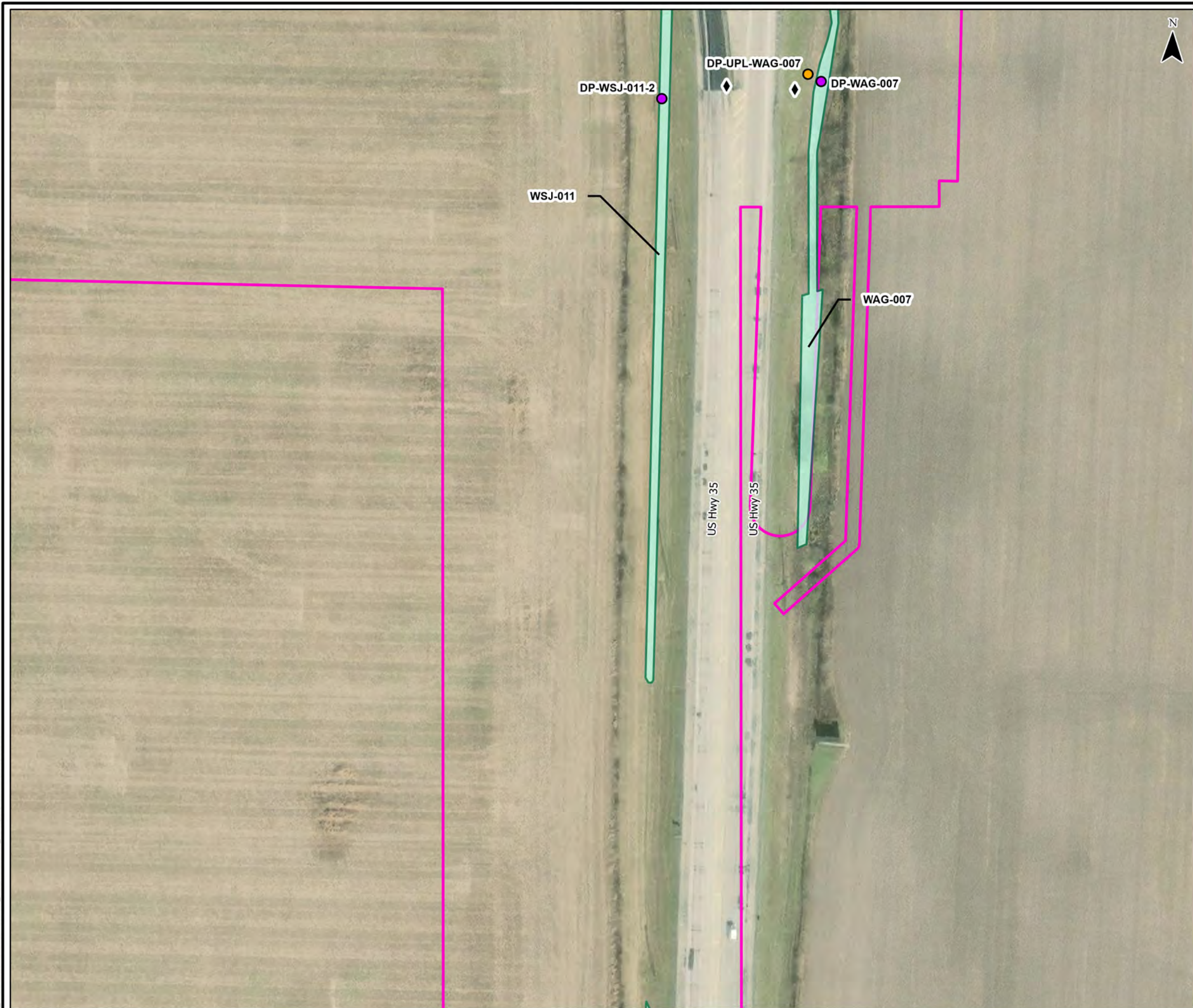
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**

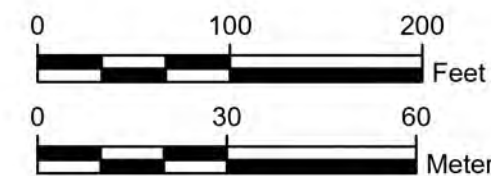
  **FIGURE 4.101**





**LEGEND:**

- ◆ Culvert
- Upland Data Point
- Wetland Data Point
- Field Delineated Wetland (PEM)
- Environmental Survey Area (ESA)



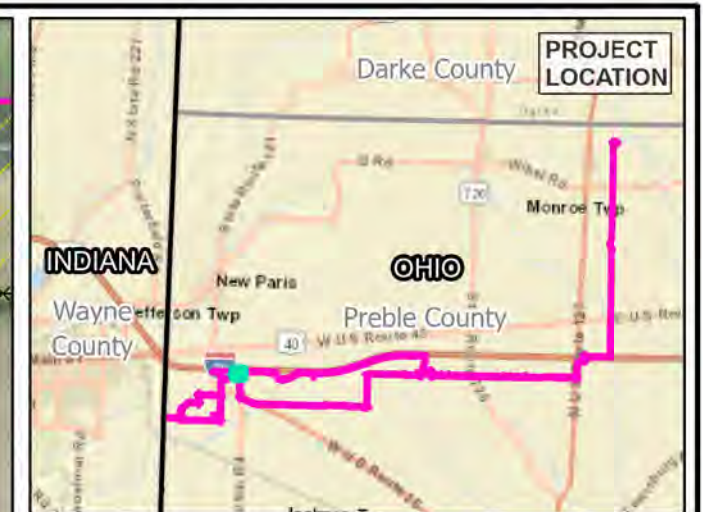
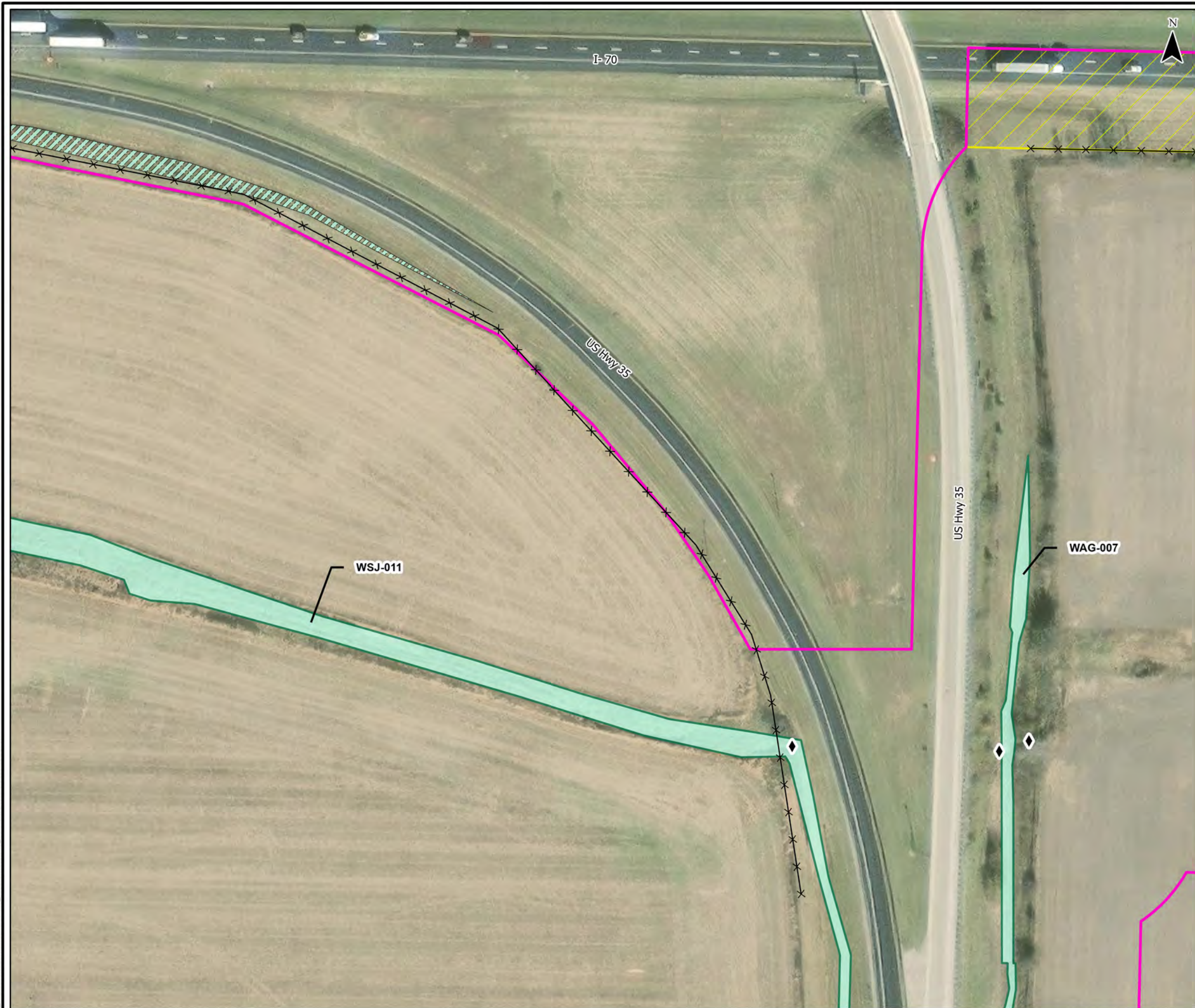
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

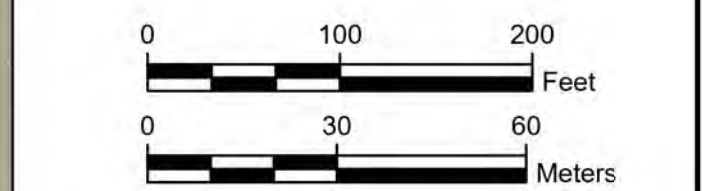
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- LEGEND:**
- ◆ Culvert
  - ✕ ODOT Limited Access Highway Fence
  - ▨ Desktop Delineated Wetland (PEM)
  - ▭ Field Delineated Wetland (PEM)
  - ▨ Desktop Determined - OPSB Approved Waiver Request Area
  - ▭ Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

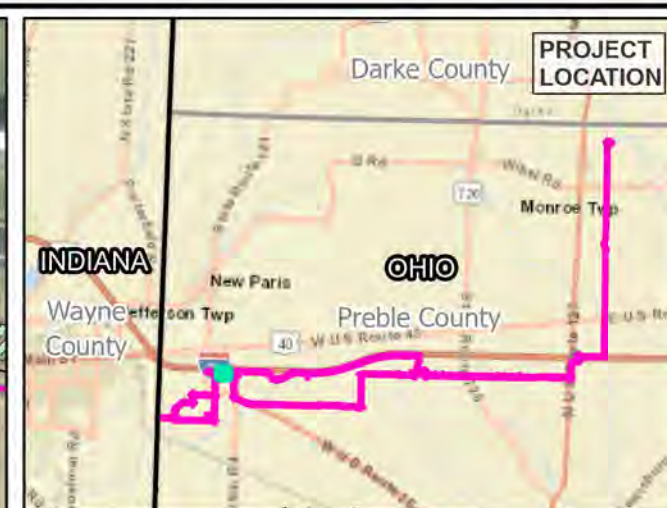
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**

aes Ohio ARCADIS **FIGURE 4.103**

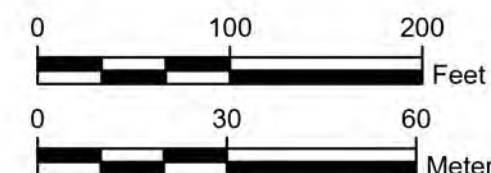


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**LEGEND:**

- ◆ Culvert
- Upland Data Point
- Wetland Data Point
- Open Ended Line
- × ODOT Limited Access Highway Fence
- ▨ Desktop Delineated Wetland (PEM)
- Field Delineated Wetland (PEM)
- Environmental Survey Area (ESA)



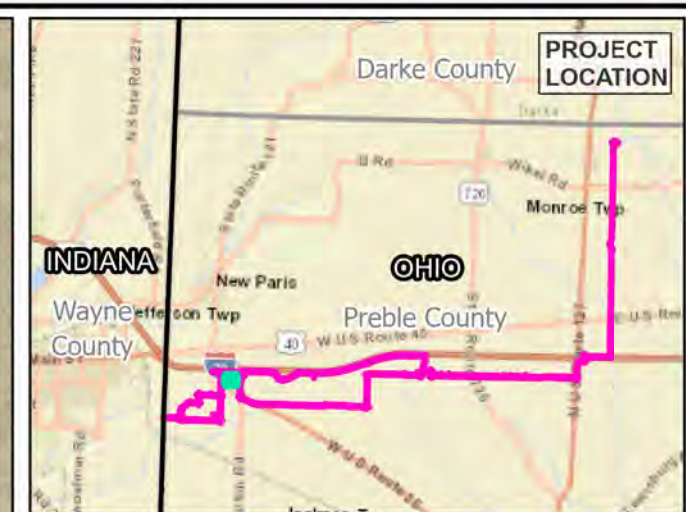
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.


WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

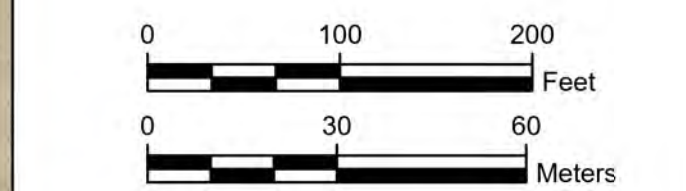
**DELINEATED FEATURES**



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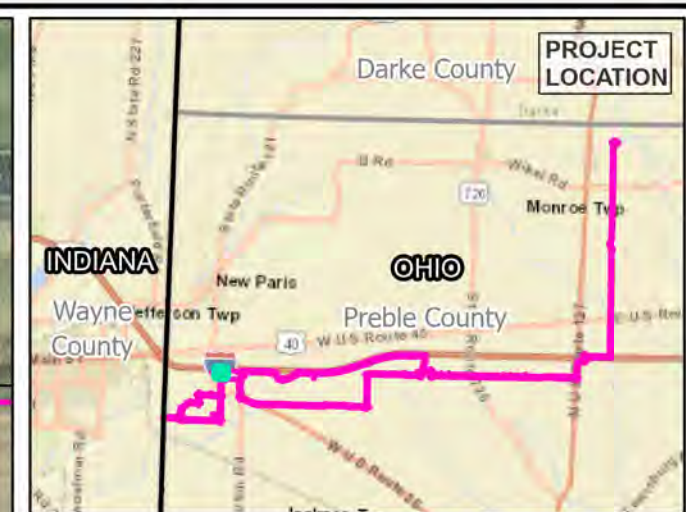
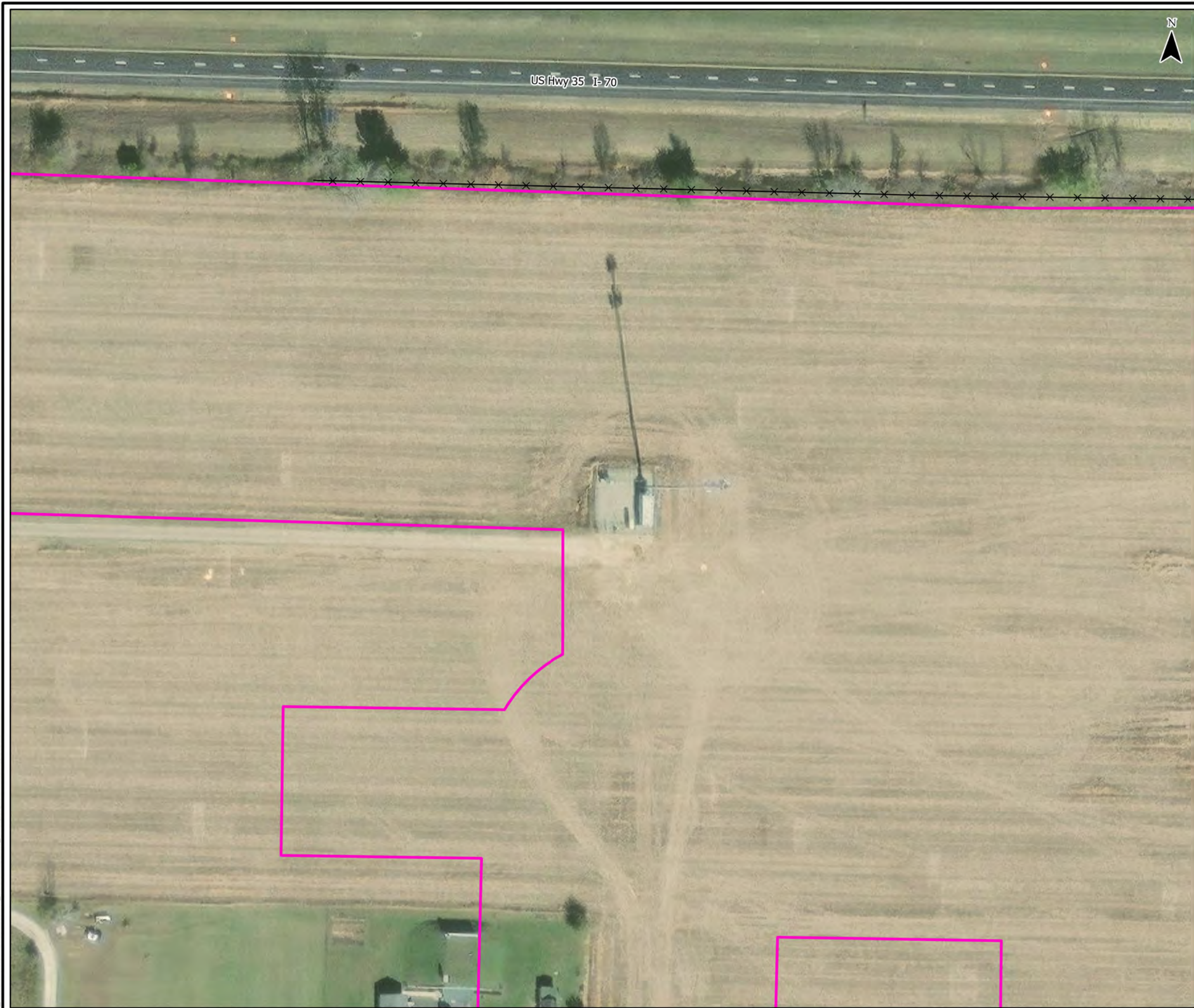
**LEGEND:**  
 Environmental Survey Area (ESA)



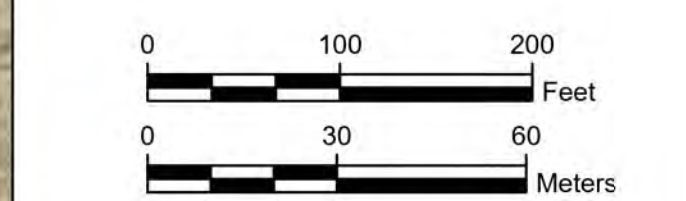
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
 <b>aes Ohio</b>	 <b>ARCADIS</b>
<b>FIGURE 4.105</b>	





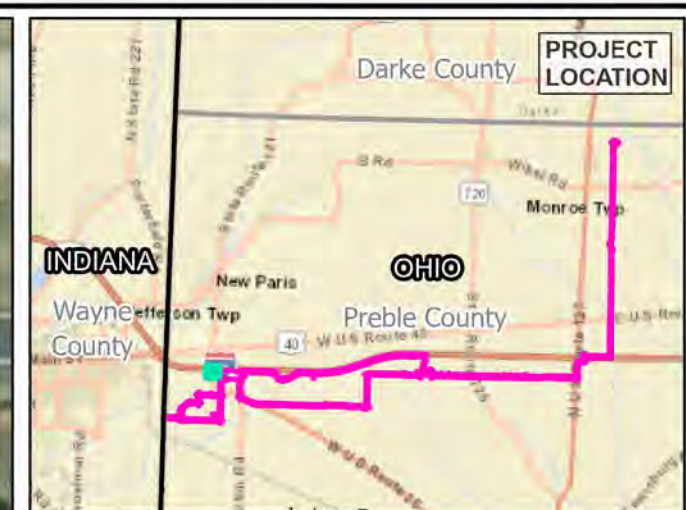
**LEGEND:**  
✕— ODOT Limited Access Highway Fence  
Environmental Survey Area (ESA)



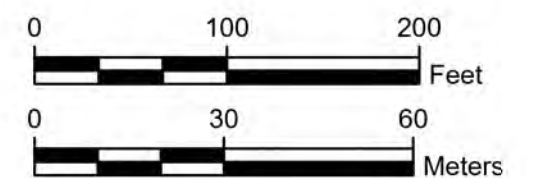
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE 4.106	





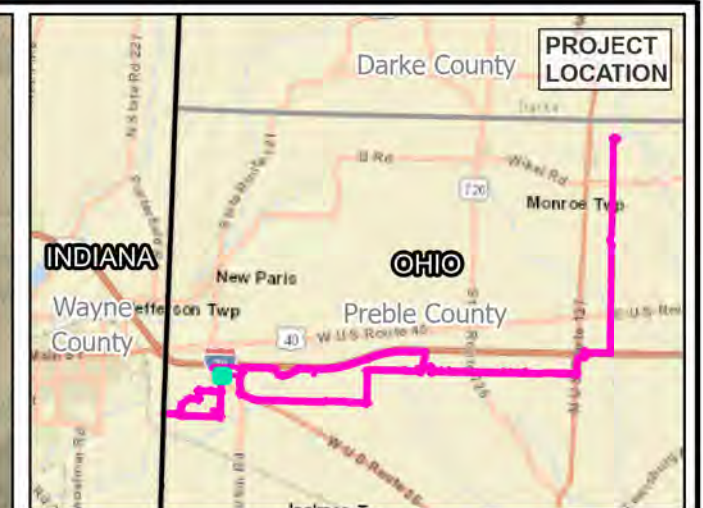
**LEGEND:**  
◆ Culvert  
Environmental Survey Area (ESA)



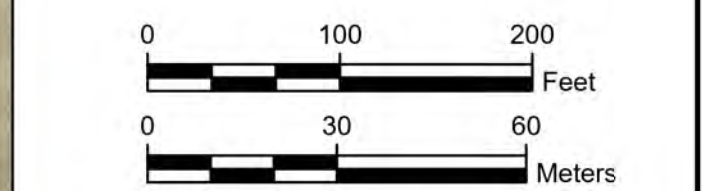
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE 4.107	





**LEGEND:**  
Environmental Survey Area (ESA)



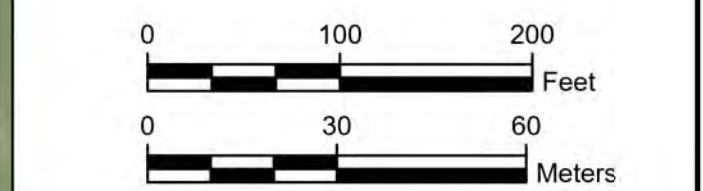
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE <b>4.108</b>	





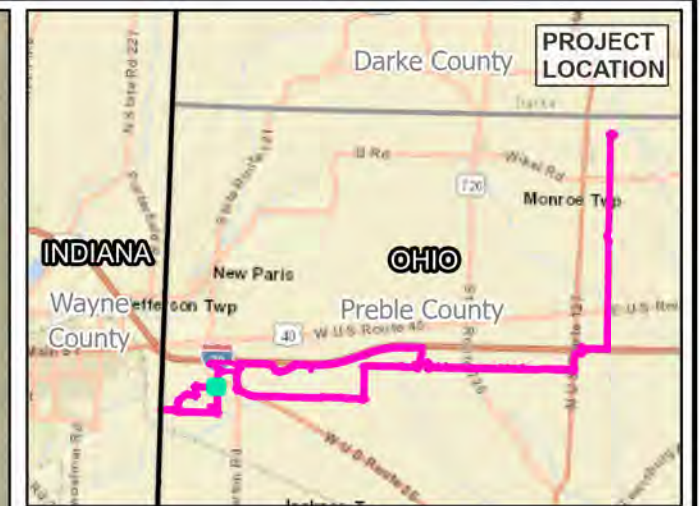
**LEGEND:**  
Environmental Survey Area (ESA)



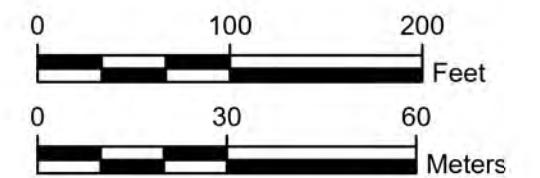
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

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<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE 4.109	





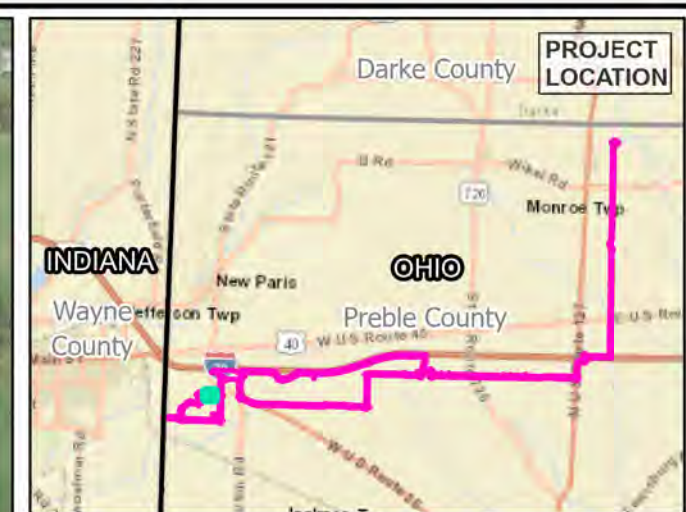
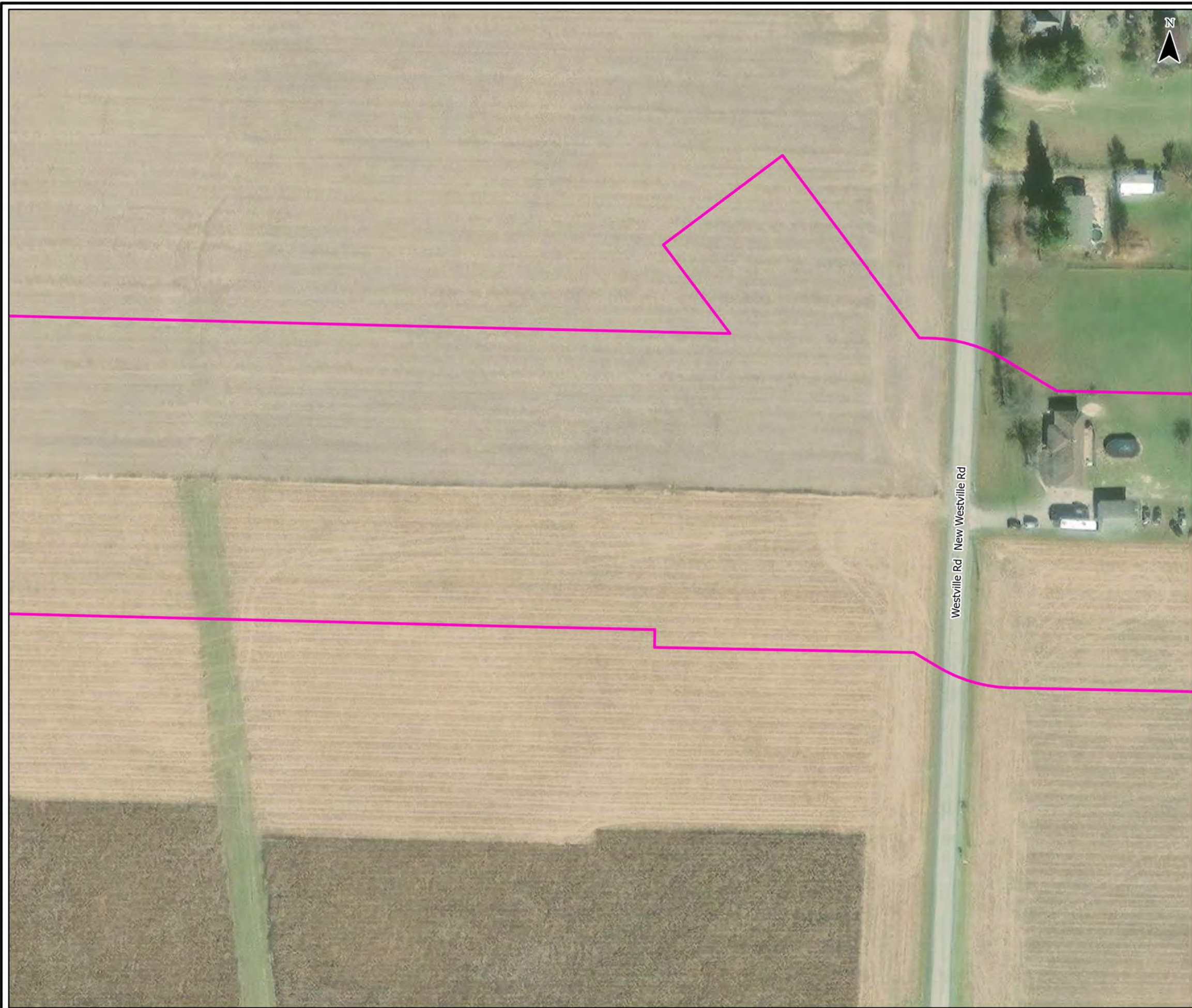
**LEGEND:**  
Environmental Survey Area (ESA)



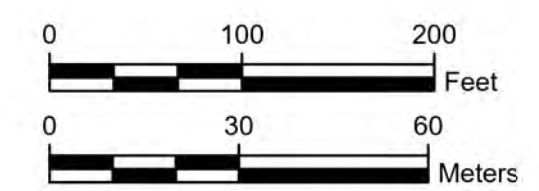
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE 4.110	





**LEGEND:**  
Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE <b>4.111</b>	



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**LEGEND:**

- Open Ended Line
- Field Delineated Stream (Ephemeral)
- Environmental Survey Area (ESA)

0 100 200 Feet  
0 30 60 Meters

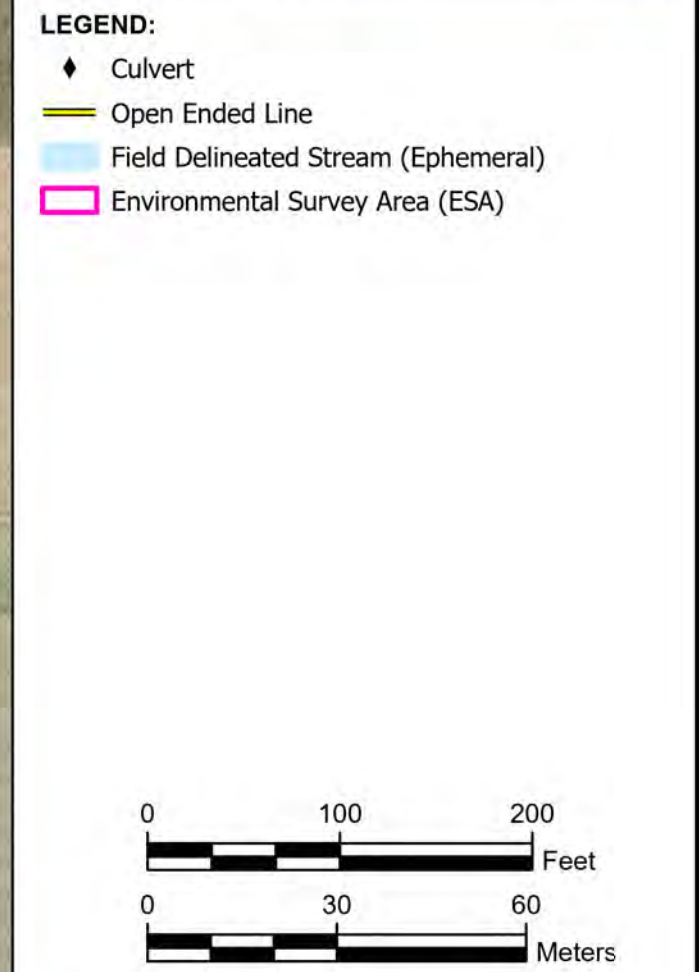
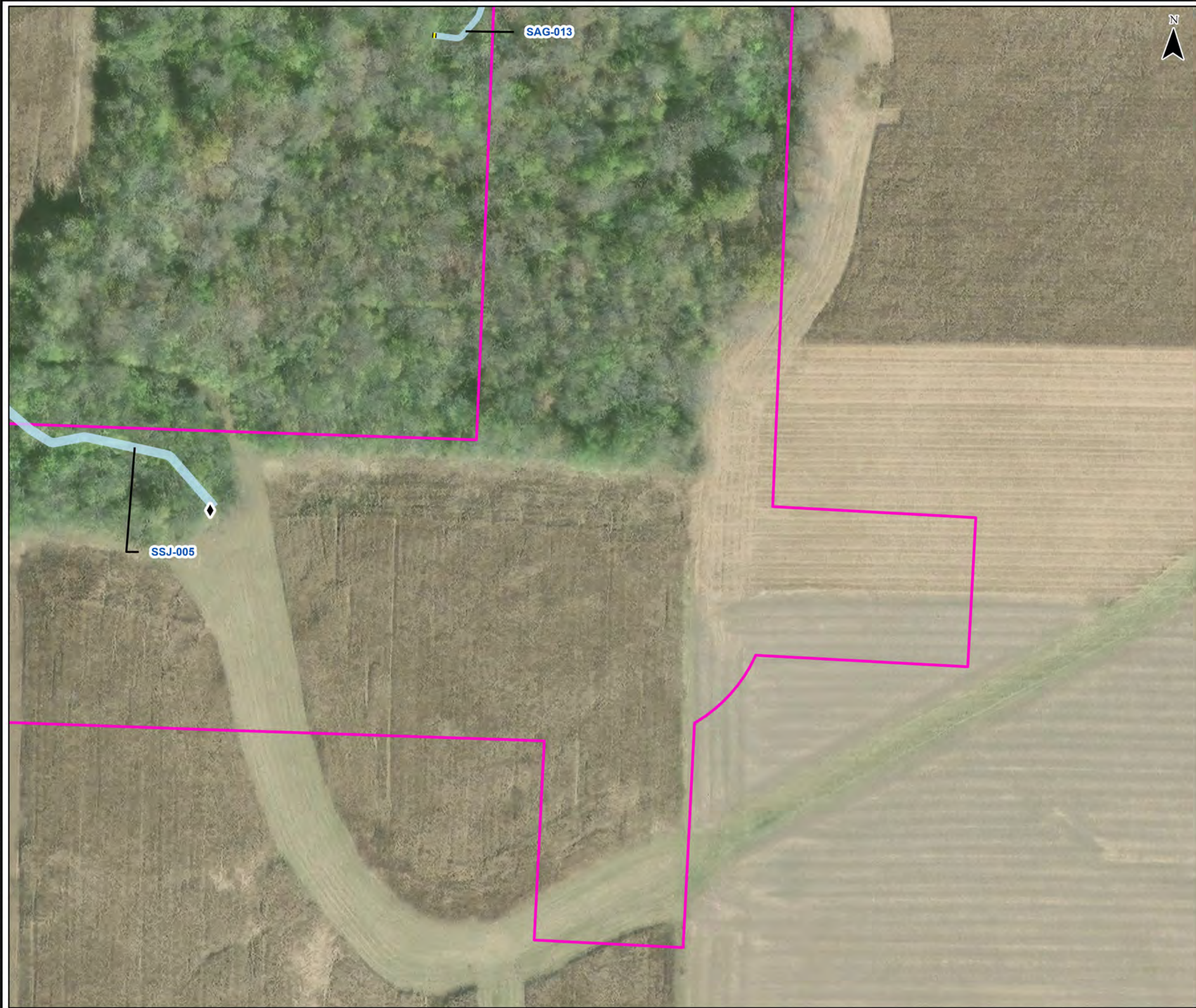
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**

aes Ohio ARCADIS **FIGURE 4.112**





ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

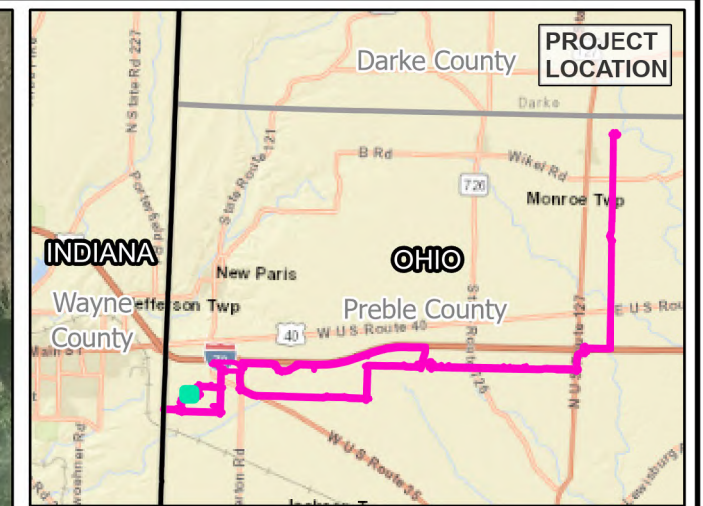
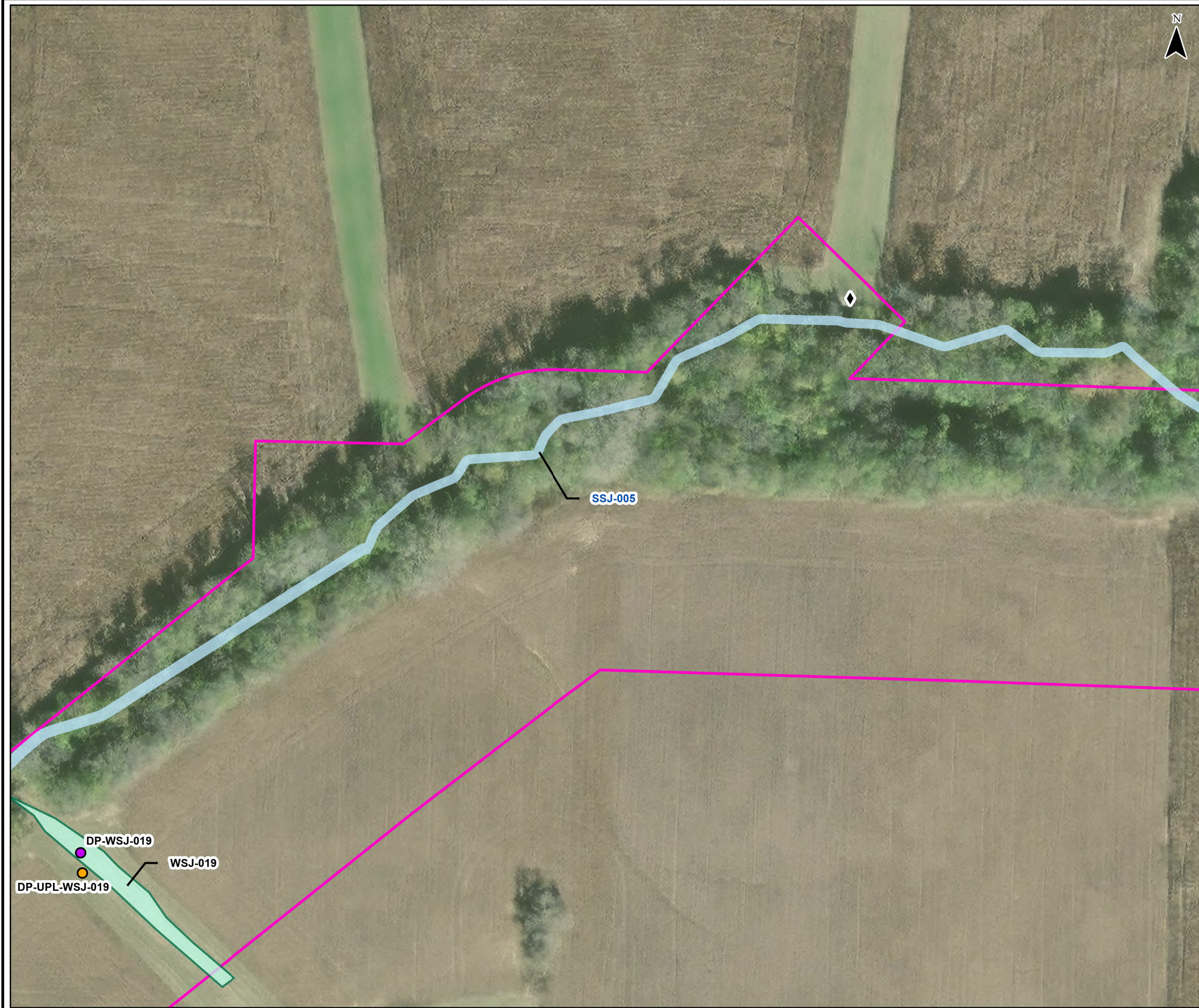
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**

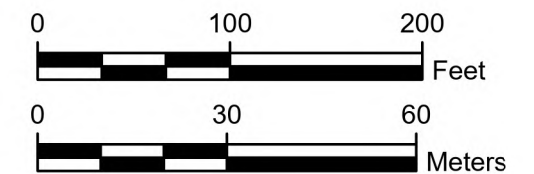
aes Ohio ARCADIS **FIGURE 4.113**



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- LEGEND:**
- ◆ Culvert
  - Upland Data Point
  - Wetland Data Point
  - Field Delineated Stream (Ephemeral)
  - Field Delineated Wetland (PEM)
  - Environmental Survey Area (ESA)

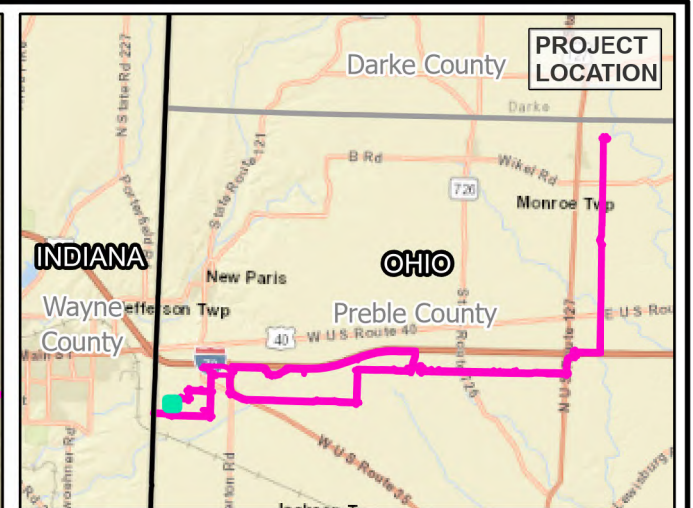
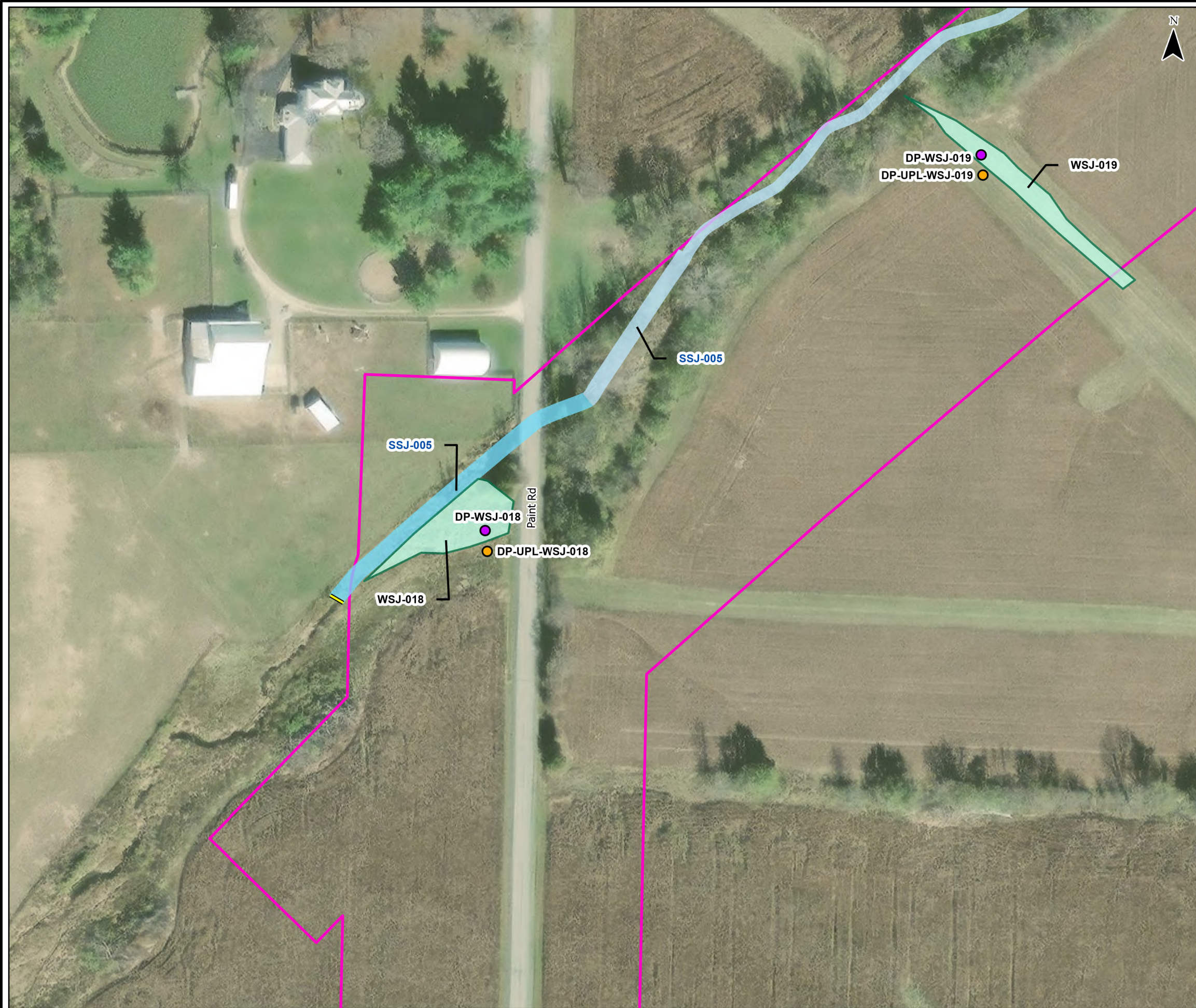


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

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<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE 4.114	

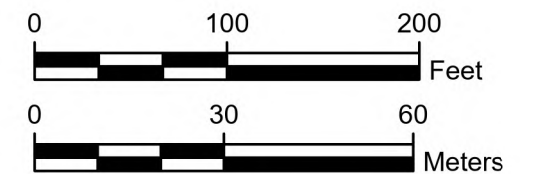


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**LEGEND:**

- Upland Data Point
- Wetland Data Point
- Open Ended Line
- Field Delineated Stream (Ephemeral)
- Field Delineated Stream (Intermittent)
- Field Delineated Wetland (PEM)
- Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

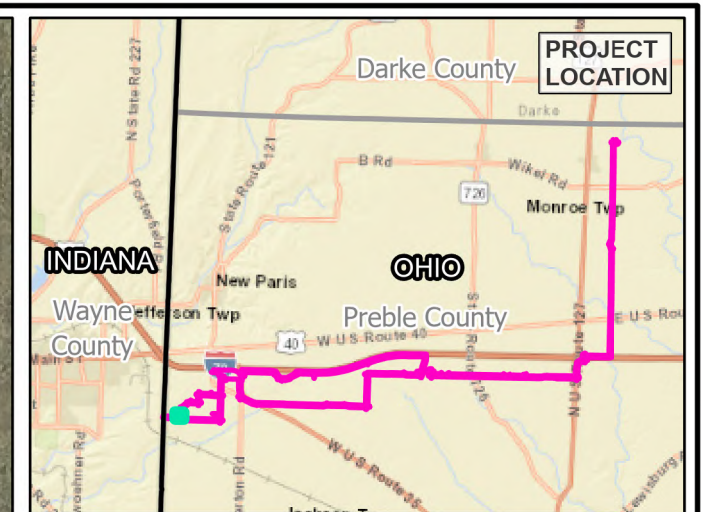
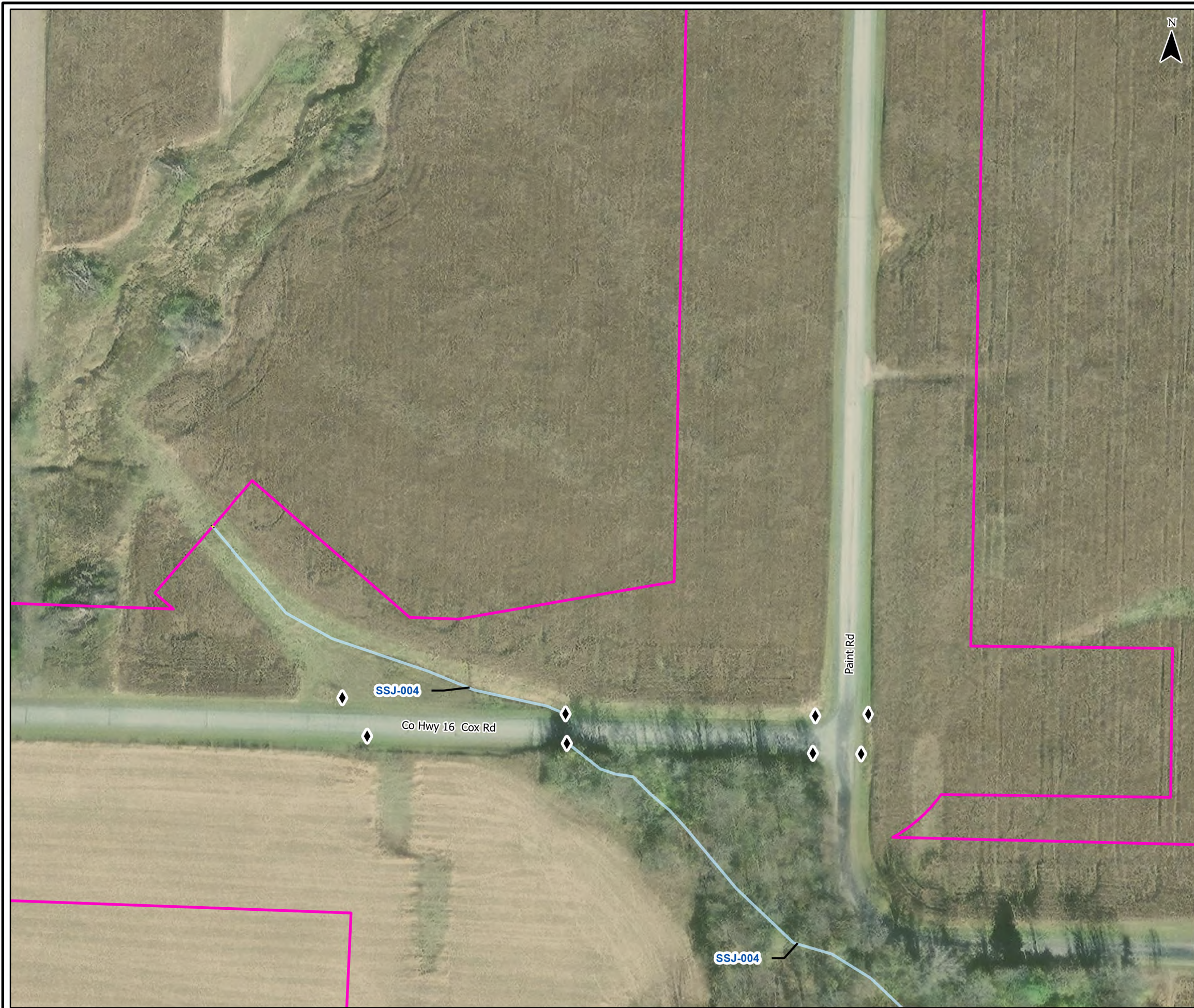
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
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**DELINEATED FEATURES**

  **FIGURE 4.115**



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**LEGEND:**

- ◆ Culvert
- Open Ended Line
- Field Delineated Stream (Ephemeral)
- Environmental Survey Area (ESA)

0 100 200 Feet  
0 30 60 Meters

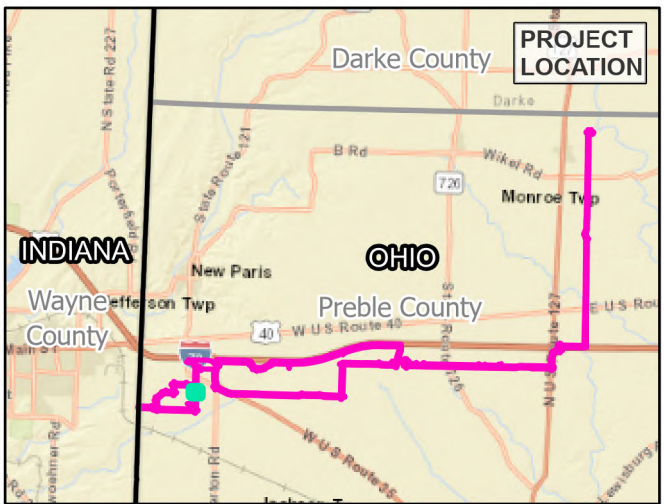
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

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TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA


**DELINEATED FEATURES**

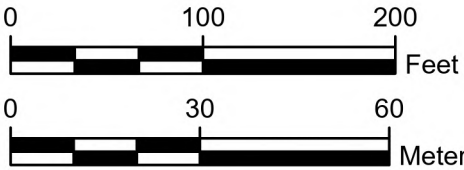
aes Ohio ARCADIS **FIGURE 4.116**





**LEGEND:**

 Environmental Survey Area (ESA)

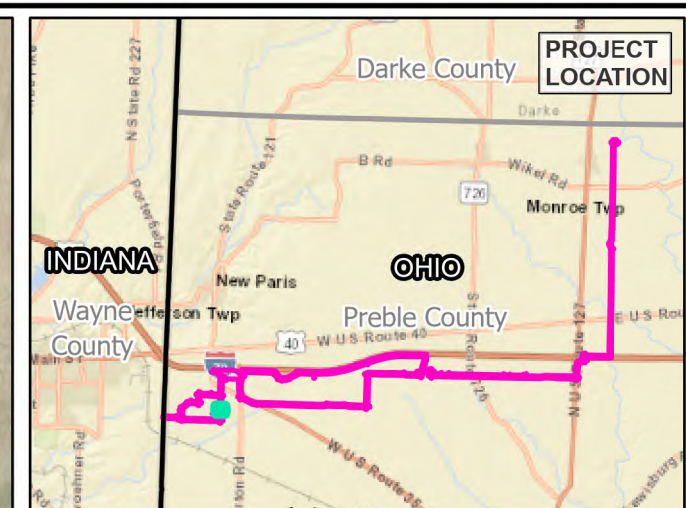


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

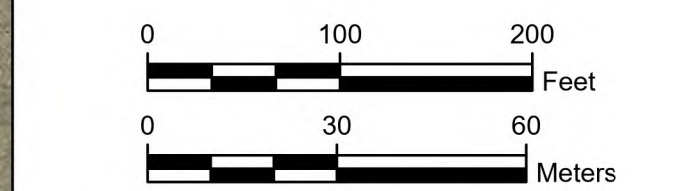
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**





**LEGEND:**  
 Environmental Survey Area (ESA)

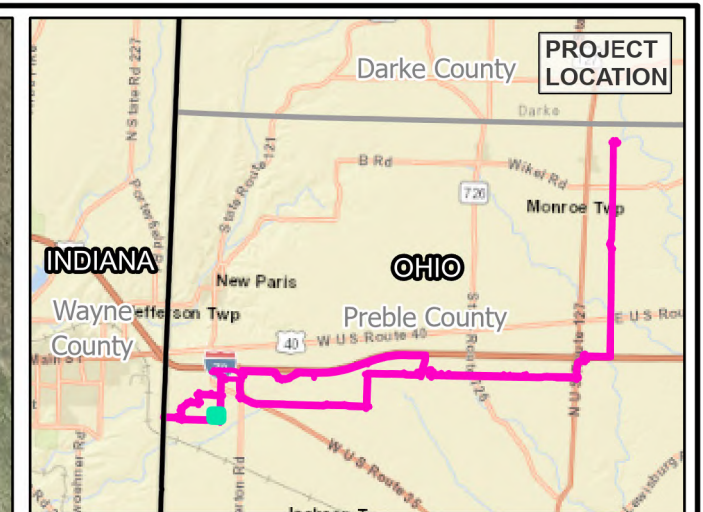


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

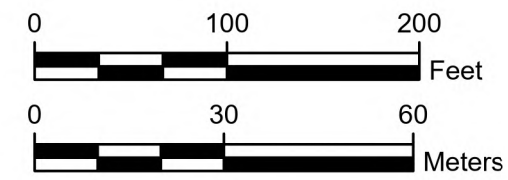
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<b>DELINEATED FEATURES</b>	
 <b>aes Ohio</b>	 <b>ARCADIS</b>
<b>FIGURE 4.118</b>	



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- LEGEND:**
- Upland Data Point
  - Wetland Data Point
  - Field Delineated Wetland (PEM)
  - Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

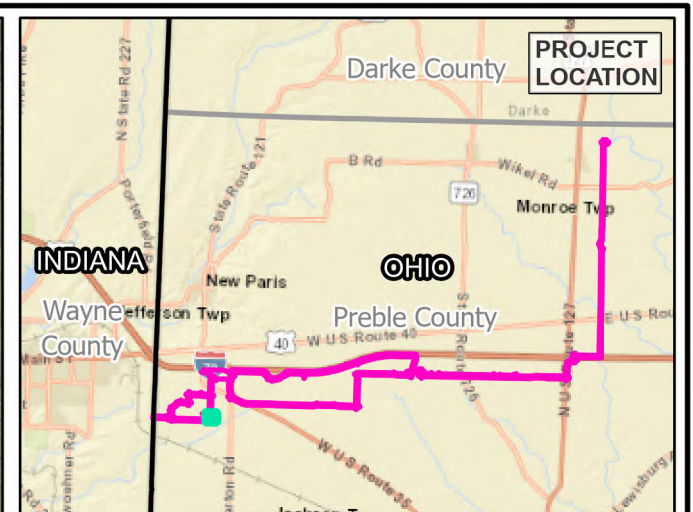
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PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**

  **FIGURE 4.119**

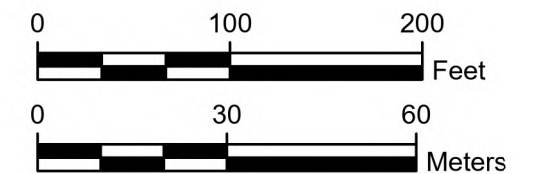


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**LEGEND:**

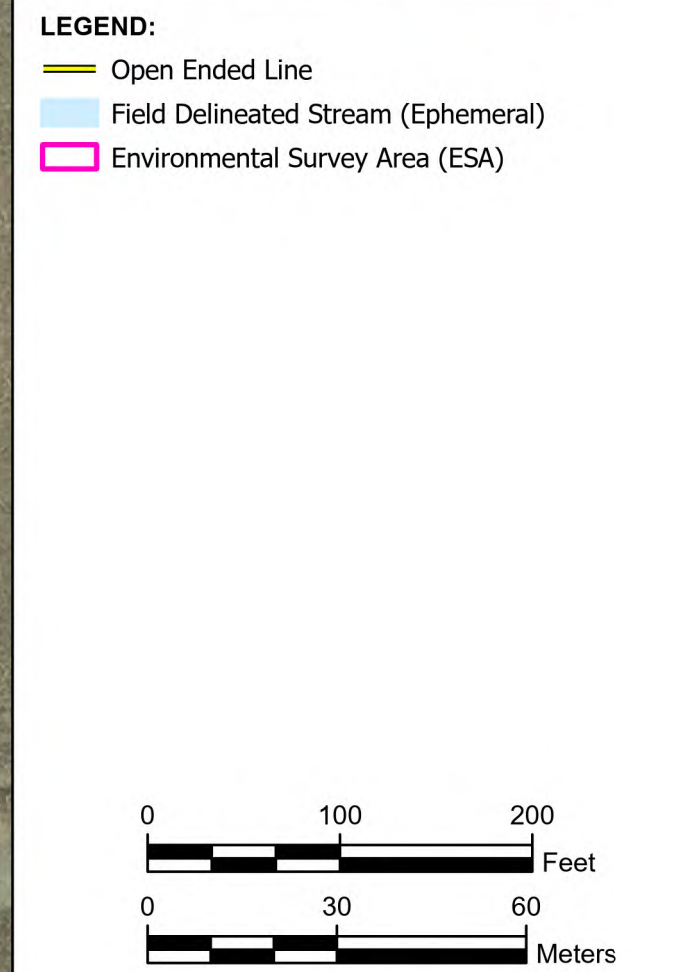
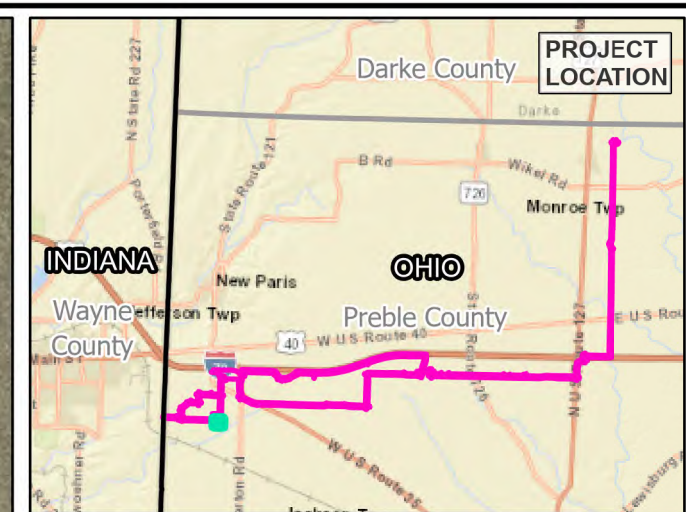
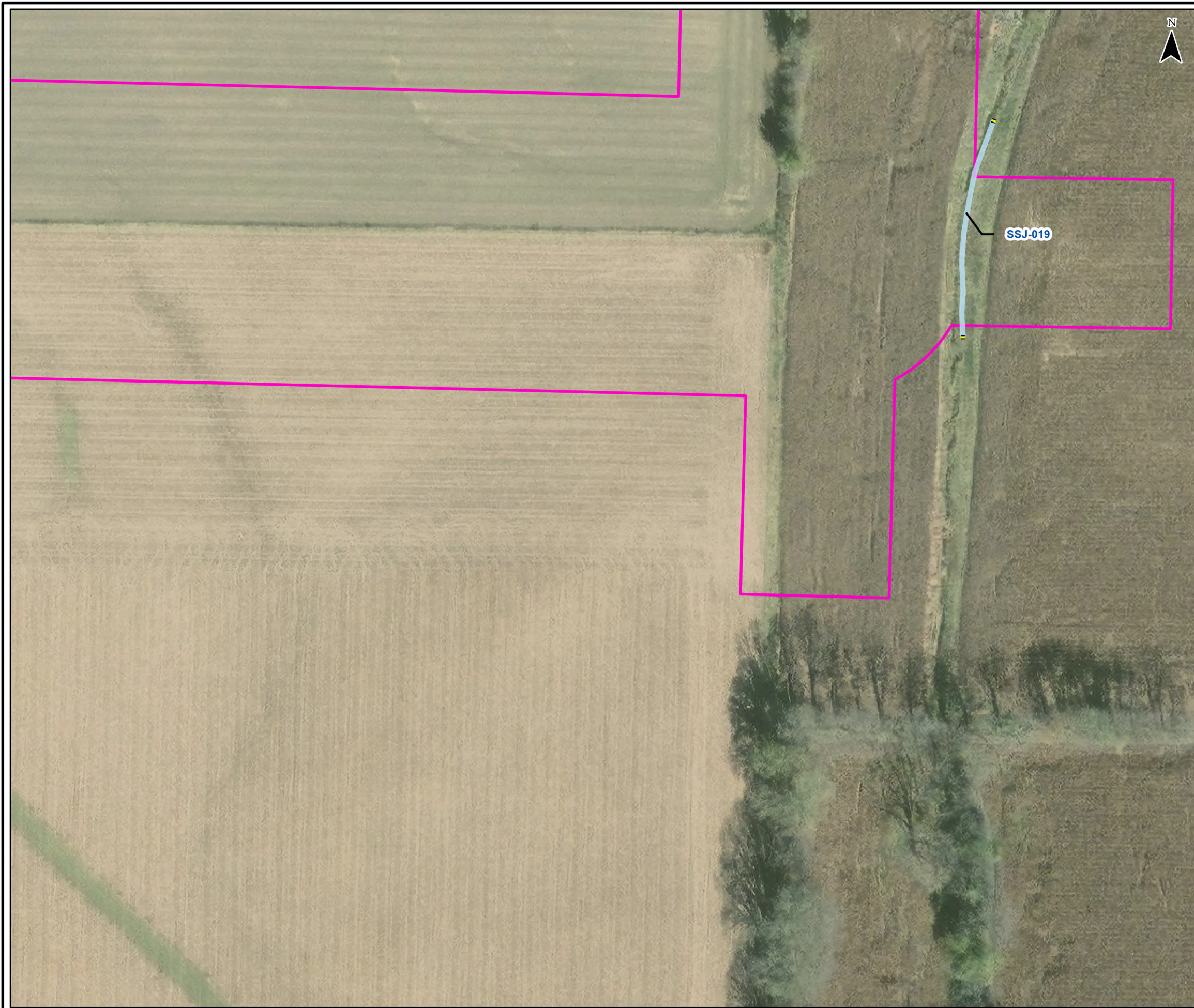
- Upland Data Point
- Wetland Data Point
- Open Ended Line
- Field Delineated Stream (Ephemeral)
- Field Delineated Wetland (PEM)
- Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE <b>4.120</b>	





ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

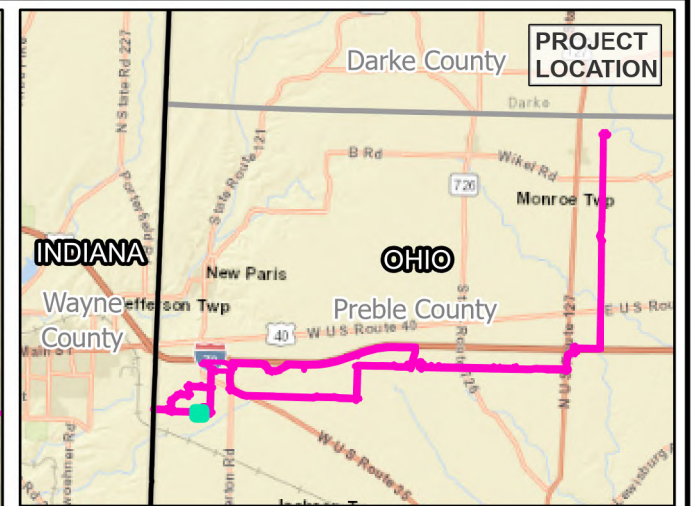
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**


**FIGURE 4.121**

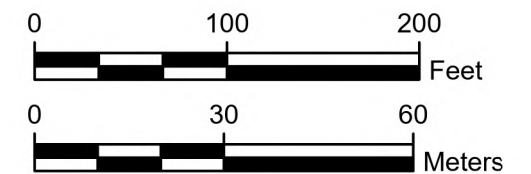
**aes** Ohio **ARCADIS**





**LEGEND:**

 Environmental Survey Area (ESA)



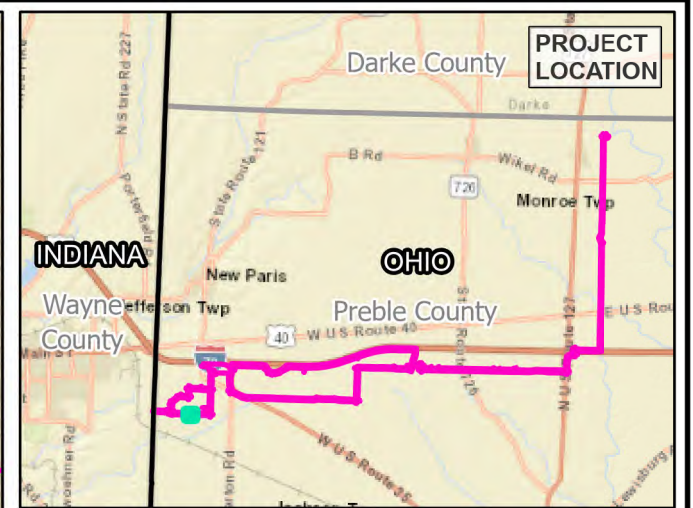
ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

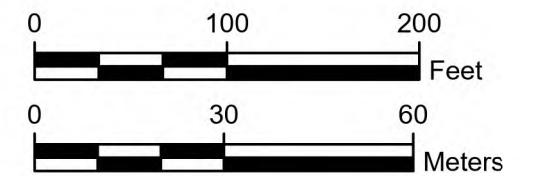
**DELINEATED FEATURES**



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- LEGEND:**
- ◆ Culvert
  - Upland Data Point
  - Wetland Data Point
  - Open Ended Line
  - Field Delineated Wetland (PEM)
  - Field Delineated Pond
  - Environmental Survey Area (ESA)

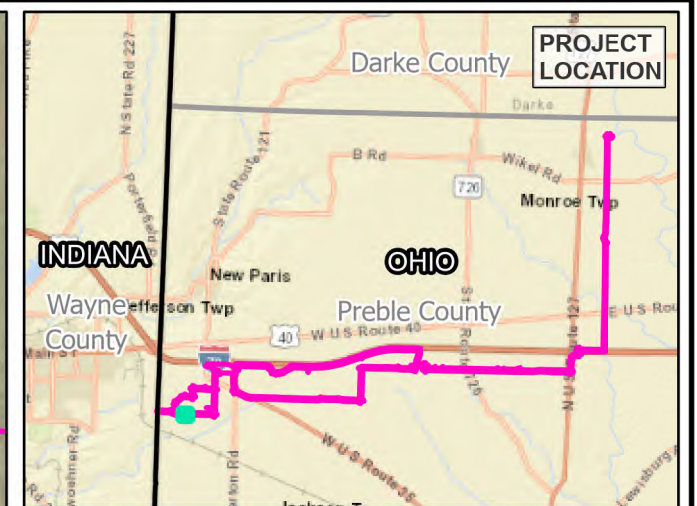
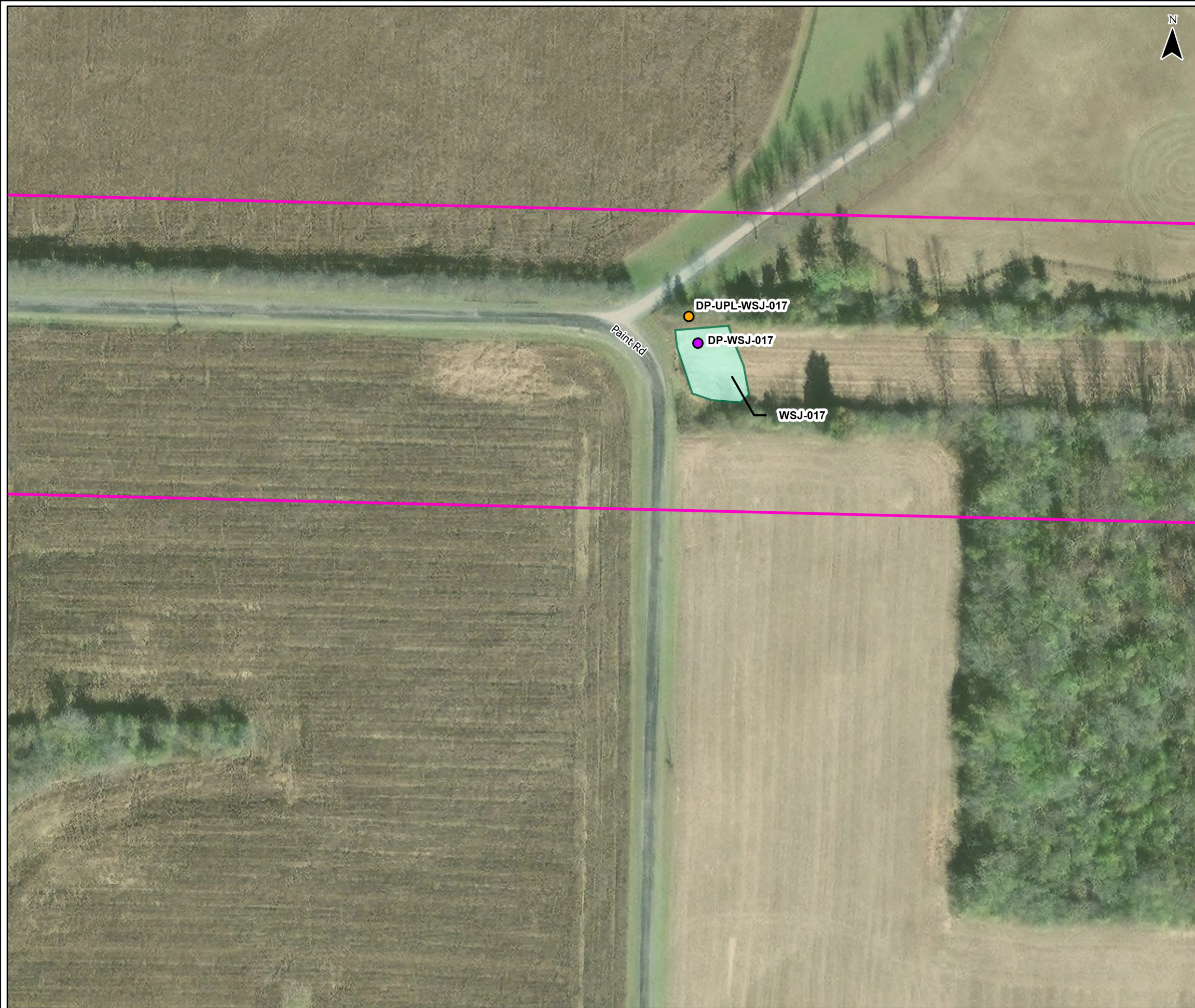


ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

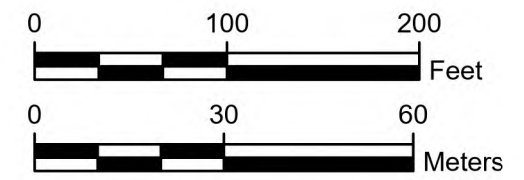
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

### DELINEATED FEATURES





- LEGEND:**
- Upland Data Point
  - Wetland Data Point
  - Field Delineated Wetland (PEM)
  - Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

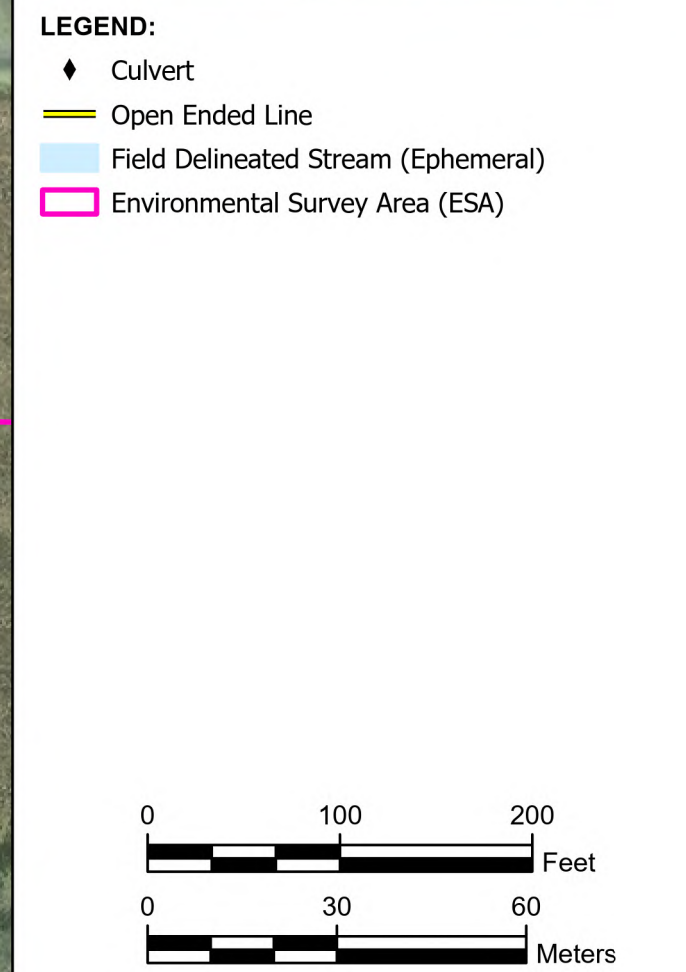
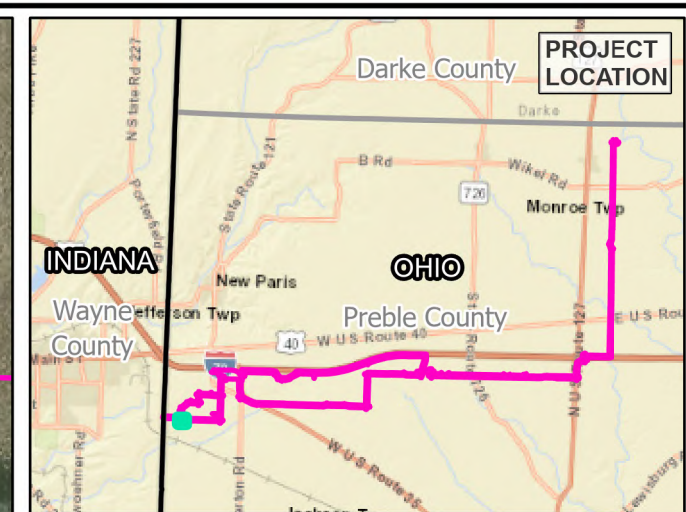
DELINEATED FEATURES

aes Ohio

ARCADIS

FIGURE  
**4.124**





ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

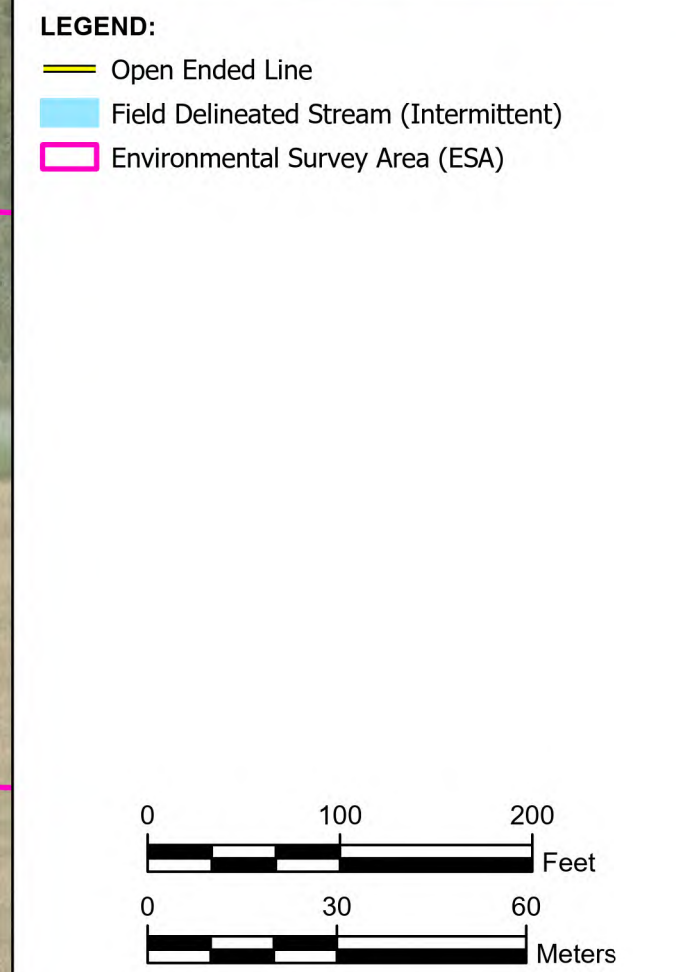
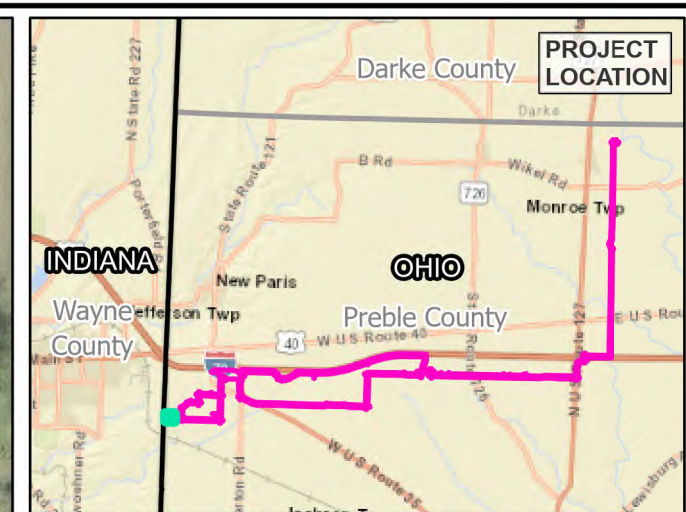
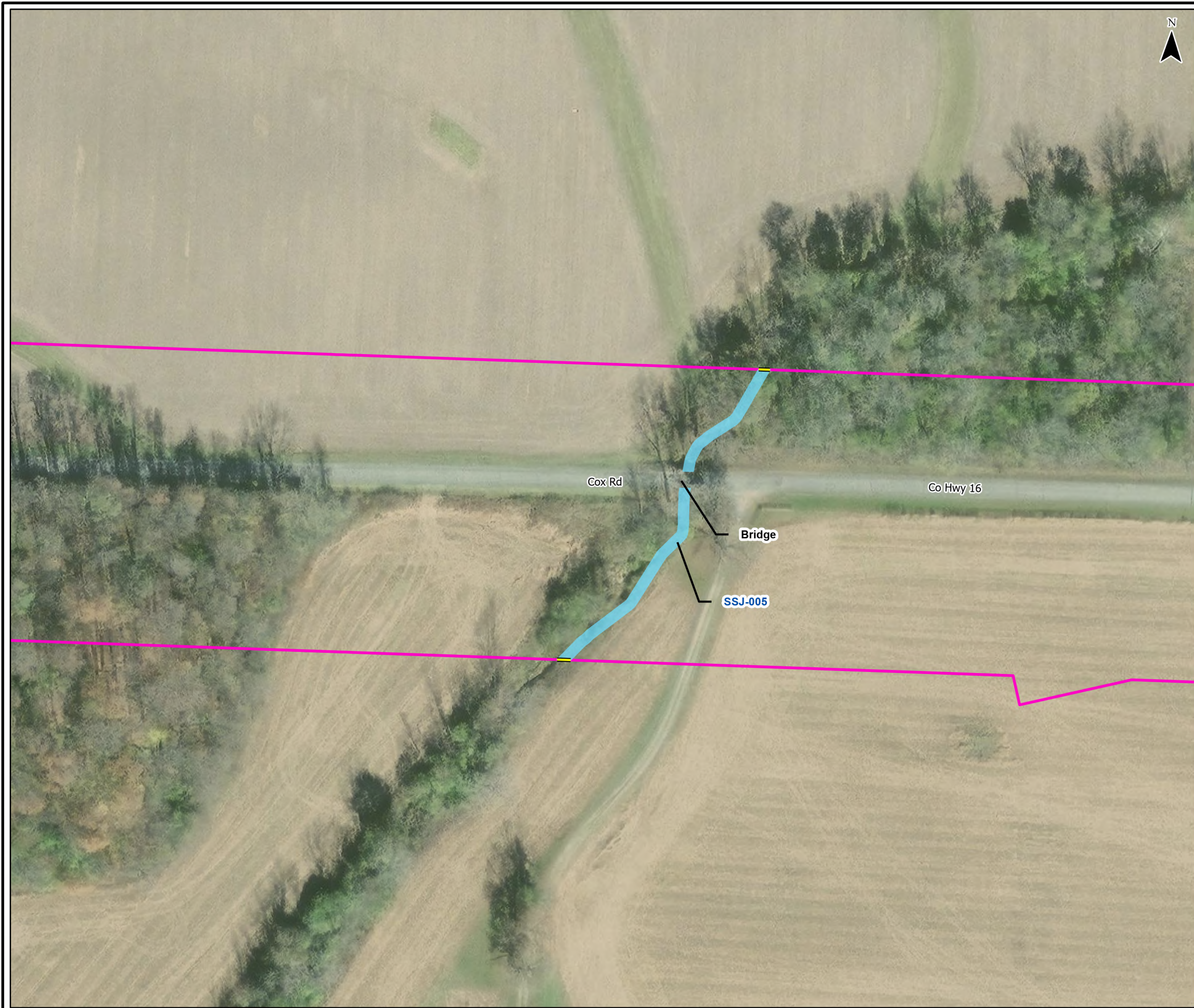
**DELINEATED FEATURES**

**FIGURE 4.125**

**aes Ohio** **ARCADIS**



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ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

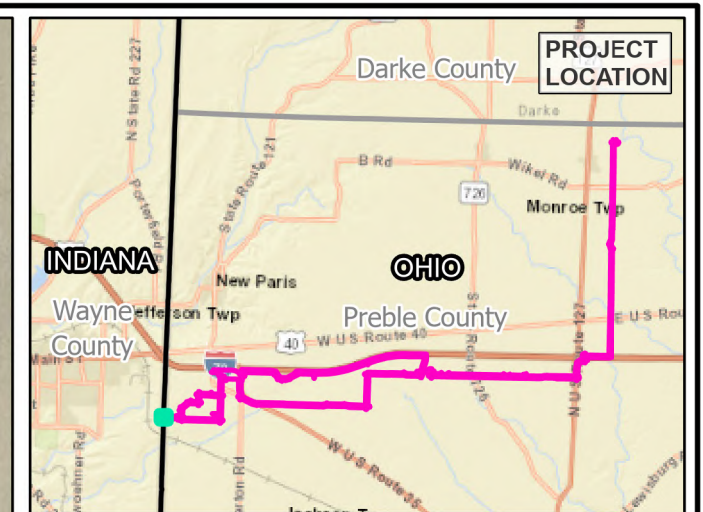
WEST MANCHESTER-BLAZER-HODGIN 138 KV  
TRANSMISSION LINE PROJECT  
PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA

**DELINEATED FEATURES**

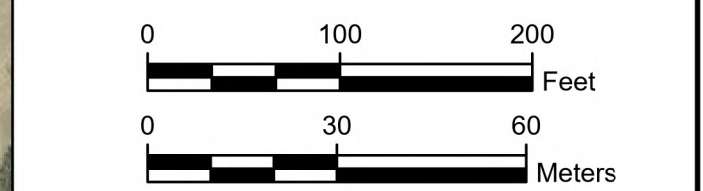
**FIGURE 4.126**

**aes Ohio** **ARCADIS**





**LEGEND:**  
 Environmental Survey Area (ESA)



ESRI World Imagery (2021) and NatGeo World Map (Inset).  
Obtained from ESRI Image Service.

WEST MANCHESTER-BLAZER-HODGIN 138 KV TRANSMISSION LINE PROJECT PREBLE COUNTY, OHIO AND WAYNE COUNTY, INDIANA	
<b>DELINEATED FEATURES</b>	
aes Ohio	ARCADIS
FIGURE <b>4.127</b>	



# Appendix A

## Photographic Log



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 1**

**Date:**

06/12/2023

**Description:**

Palustrine Emergent (PEM)  
Wetland WJS-001 in  
maintained ROW adjacent  
to farm field. Facing north.



**Photo: 2**

**Date:**

06/13/2023

**Description:**

PEM Wetland WJS-002.  
Facing south.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 3**

**Date:**  
06/14/2023

**Description:**  
PEM Wetland WJS-003 in  
maintained ROW adjacent  
to farm field. Facing north.



**Photo: 4**

**Date:**  
06/14/2023

**Description:**  
PSS Wetland WJS-004 in  
maintained ROW adjacent  
to farm field. Facing west.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 5**

**Date:**  
06/14/2023

**Description:**  
PEM wetland WSJ-005.  
Facing north.



**Photo: 6**

**Date:**  
06/15/2023

**Description:**  
PEM portion of wetland  
WSJ-006. Facing north.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 7**

**Date:**  
06/15/2023

**Description:**  
PFO portion of wetland  
WSJ-006. Facing south.



**Photo: 8**

**Date:**  
06/15/2023

**Description:**  
PFO wetland WSJ-007.  
Facing north.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 9**

**Date:**  
06/16/2023

**Description:**  
PFO wetland WSJ-008.  
Facing west.



**Photo: 10**

**Date:**  
06/28/2023

**Description:**  
PEM wetland WSJ-009.  
Facing east.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 11**

**Date:**  
06/29/2023

**Description:**  
PEM wetland WSJ-010.  
Facing west.



**Photo: 12**

**Date:**  
06/29/2023

**Description:**  
PEM wetland WSJ-011.  
Facing west.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 13**

**Date:**  
06/30/2023

**Description:**  
PEM wetland WSJ-012.  
Facing east.



**Photo: 14**

**Date:**  
06/29/2023

**Description:**  
PEM wetland WSJ-017.  
Farmed emergent wetland.  
Facing east.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 15**

**Date:**  
10/17/2023

**Description:**  
PEM wetland WSJ-018.  
Facing west.



**Photo: 16**

**Date:**  
10/17/2023

**Description:**  
PEM wetland WSJ-019 in  
agricultural drainage area.  
Facing northeast.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 17**

**Date:**  
10/17/2023

**Description:**  
PEM wetland WSJ-020 in  
agricultural drainage area.  
Facing south.



**Photo: 18**

**Date:**  
10/18/2023

**Description:**  
PEM wetland WSJ-021  
adjacent to highway. Facing  
west.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 19**

**Date:**  
06/13/2023

**Description:**  
PEM Wetland WAG-001.  
Facing north.



**Photo: 20**

**Date:**  
06/13/2023

**Description:**  
PEM Wetland WAG-002.  
Facing east.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 21**

**Date:**  
06/13/2023

**Description:**  
PEM Wetland WAG-003.  
Facing north.



**Photo: 22**

**Date:**  
06/15/2023

**Description:**  
PEM Wetland WAG-005.  
Facing north.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 23**

**Date:**  
06/15/2023

**Description:**  
PEM Wetland WAG-006.  
Facing west.



**Photo: 24**

**Date:**  
06/15/2023

**Description:**  
PEM Wetland WAG-007.  
Facing south.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 25**

**Date:**  
10/17/2023

**Description:**  
PEM Wetland WAG-008.  
Facing north.



**Photo: 26**

**Date:**  
06/12/2023

**Description:**  
Intermittent stream SSJ-001, UNT to Dry Fork facing east looking upstream.  
Stream was identified on 6/12/23, photos were retaken on 10/18/2023.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 27**

**Date:**  
06/12/2023

**Description:**  
Perennial stream SSJ-002,  
UNT to Dry Fork facing  
west looking upstream.  
Stream was identified on  
6/12/23, photos were  
retaken on 10/18/2023.



**Photo: 28**

**Date:**  
10/17/2023

**Description:**  
Ephemeral stream SSJ-004,  
UNT to Elkhorn Creek  
facing southeast looking  
upstream.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 29**

**Date:**  
10/17/2023

**Description:**  
Ephemeral stream SSI-005,  
UNT to Elkhorn Creek  
facing west looking  
downstream.



**Photo: 30**

**Date:**  
06/16/2023

**Description:**  
Ephemeral stream SSI-006,  
UNT to Elkhorn Creek  
facing northeast looking  
upstream.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 31**

**Date:**  
06/16/2023

**Description:**  
Perennial stream SSI-007,  
Elkhorn Creek facing east  
looking downstream.



**Photo: 33**

**Date:**  
10/18/2023

**Description:**  
Ephemeral stream SSI-019,  
UNT to Elkhorn Creek  
facing north looking  
upstream.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 34**

**Date:**  
06/12/2023

**Description:**  
Perennial stream SAG-001,  
UNT to Goose Creek  
looking upstream.



**Photo: 35**

**Date:**  
06/13/2023

**Description:**  
Perennial stream SAG-002,  
Goose Creek looking  
upstream.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 36**

**Date:**  
06/13/2023

**Description:**  
Perennial stream SAG-003,  
Price Creek facing  
southeast looking  
downstream.



**Photo: 37**

**Date:**  
06/13/2023

**Description:**  
Perennial stream SAG-004,  
Dry Fork facing north  
looking downstream.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 38**

**Date:**  
06/13/2023

**Description:**  
Perennial portion of stream  
SAG-005 , UNT to Dry Fork  
facing north looking  
upstream.



**Photo: 39**

**Date:**  
06/14/2023

**Description:**  
Perennial stream SAG-007,  
Bantas Fork facing south  
looking downstream.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 40**

**Date:**  
06/14/2023

**Description:**  
Intermittent stream SAG-008, UNT to Bantas Fork facing east looking downstream.



**Photo: 41**

**Date:**  
06/14/2023

**Description:**  
Perennial stream SAG-009, Sevenmile Creek facing north looking upstream.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 42**

**Date:**  
06/14/2023

**Description:**  
Perennial stream SAG-010,  
UNT to Sevenmile Creek  
facing east looking  
downstream.



**Photo: 43**

**Date:**  
06/15/2023

**Description:**  
Intermittent stream SAG-  
011, UNT to Elkhorn Creek  
facing north looking  
upstream.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 44**

**Date:**  
06/15/2023

**Description:**  
Intermittent stream SAG-012, UNT to Elkhorn Creek facing north looking upstream.



**Photo: 45**

**Date:**  
10/17/2023

**Description:**  
Ephemeral stream SAG-013, UNT to Elkhorn Creek, facing northeast looking upstream.



## Project Photographs

AES Corporation  
West Manchester-Blazer-Hodgin 138 kV Transmission Line Project  
Preble County, Ohio and Wayne County, Indiana



**Photo: 46**

**Date:**  
06/14/2023

**Description:**  
Pond PAG-001. Facing east.



# Appendix B

## USACE Wetland Determination Forms



OMB Control #: 0710-0024, Exp:11/30/2024  
Requirement Control Symbol EXEMPT:  
(Authority: AR 335-15, paragraph 5-2a)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <u>  X  </u>	No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b>	<b>Yes <u>  X  </u></b>	<b>No <u>      </u></b>
Hydric Soil Present?	Yes <u>  X  </u>	No <u>      </u>			
Wetland Hydrology Present?	Yes <u>  X  </u>	No <u>      </u>			
Remarks: Data point for Wetland WAG-001					

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
(Plot size: 30 )				
1.	<i>Fraxinus pennsylvanica</i>	15	Yes	FACW
2.	<i>Acer saccharinum</i>	15	Yes	FACW
3.	<i>Juglans nigra</i>	10	Yes	FACU
4.	<i>Acer rubrum</i>	5	No	FAC
5.				
		45	=Total Cover	
Sapling/Shrub Stratum				
(Plot size: 15 )				
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Herb Stratum				
(Plot size: 5 )				
1.	<i>Carex frankii</i>	20	Yes	OBL
2.	<i>Parthenocissus quinquefolia</i>	20	Yes	FACU
3.	<i>Toxicodendron radicans</i>	15	Yes	FAC
4.	<i>Phalaris arundinacea</i>	10	No	FACW
5.	<i>Lysimachia nummularia</i>	10	No	FACW
6.	<i>Rosa multiflora</i>	5	No	FACU
7.				
8.				
9.				
10.				
		80	=Total Cover	
Woody Vine Stratum				
(Plot size: 5 )				
1.				
2.				
			=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species 20	x 1 = 20
FACW species 50	x 2 = 100
FAC species 20	x 3 = 60
FACU species 35	x 4 = 140
UPL species 0	x 5 = 0
Column Totals: 125 (A)	320 (B)
Prevalence Index = B/A = 2.56	

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is  $\leq 3.0^1$

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: Dp-WAG-001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 3/2	95	10YR 3/4	5	C	M	Loamy/Clayey	Distinct redox concentrations
6-16	10YR 3/2	90	10YR 3/4	10	C	M	Loamy/Clayey	Distinct redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input checked="" type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: <u>                    </u> N/A Depth (inches): <u>                    </u>	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Remarks:  
Hydric soil indicators present

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>          </u> Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>          </u> Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>          </u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Wetland hydrology indicators are present



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

**OMB Control #: 0710-0024, Exp:11/30/2024**  
**Requirement Control Symbol EXEMPT:**  
**(Authority: AR 335-15, paragraph 5-2a)**

Project/Site: New Westville Project City/County: Preble Sampling Date: 06/12/23  
Applicant/Owner: AES Ohio State: OH Sampling Point: Dp-UPL-WAG-001  
Investigator(s): A. Glenn Section, Township, Range: S25, T9N, R2E  
Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): none  
Slope (%): 1 Lat: 39.8446759° Long: -84.6142987° Datum: NAD83  
Soil Map Unit Name: CtA: Crosby-Celina silt loams, 0 to 2 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No     

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <u>    </u>	No <u>X</u>
Hydric Soil Present?	Yes <u>    </u>	No <u>X</u>
Wetland Hydrology Present?	Yes <u>    </u>	No <u>X</u>

<b>Is the Sampled Area</b>		
<b>within a Wetland?</b>	Yes <u>    </u>	No <u>X</u>

**Remarks:**

Upland data point for Wetland WAG-001

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15</u> )			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5</u> )			
1. <u>Festuca rubra</u>		<u>25</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Vernonia gigantea</u>		<u>15</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Trifolium pratense</u>		<u>10</u>	<u>No</u>	<u>FACU</u>
4. <u>Sorghum halepense</u>		<u>10</u>	<u>No</u>	<u>FACU</u>
5.				
6.				
7.				
8.				
9.				
10.				
		<u>60</u> =Total Cover		
Woody Vine Stratum	(Plot size: <u>5</u> )			
1.				
2.				
		=Total Cover		

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>15</u>	x 3 = <u>45</u>
FACU species <u>45</u>	x 4 = <u>180</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>60</u> (A)	<u>225</u> (B)
Prevalence Index = B/A = <u>3.75</u>	

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation

     2 - Dominance Test is >50%

     3 - Prevalence Index is ≤3.0<sup>1</sup>

     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes      No X

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: Dp-UPL-WAG-001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 3/4	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: <u>                    </u> N/A Depth (inches): <u>                    </u>	<b>Hydric Soil Present?</b> Yes <u>      </u> No <u>  X  </u>
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Remarks:  
Hydric soil indicators absent

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <u>      </u> No <u>  X  </u> Depth (inches): <u>          </u> Water Table Present?      Yes <u>      </u> No <u>  X  </u> Depth (inches): <u>          </u> Saturation Present?        Yes <u>      </u> No <u>  X  </u> Depth (inches): <u>          </u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>      </u> No <u>  X  </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Wetland hydrology indicators are absent



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

**OMB Control #: 0710-0024, Exp:11/30/2024**  
**Requirement Control Symbol EXEMPT:**  
**(Authority: AR 335-15, paragraph 5-2a)**

Project/Site: New Westville Project City/County: Preble Sampling Date: 06/12/23  
Applicant/Owner: AES Ohio State: OH Sampling Point: Dp-WAG-002  
Investigator(s): A. Glenn Section, Township, Range: S14 T9N R2E  
Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave  
Slope (%): 1 Lat: 39.8782512° Long: -84.6149022° Datum: NAD83  
Soil Map Unit Name: KoA: Kokomo silty clay loam, 0 to 1 percent slopes (622565) NWI classification: N/A  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No       
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

<p>Hydrophytic Vegetation Present? Yes <u>X</u> No <u>    </u> Hydric Soil Present? Yes <u>X</u> No <u>    </u> Wetland Hydrology Present? Yes <u>X</u> No <u>    </u></p>	<p><b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No <u>    </u></p>
<p>Remarks: Data point for Wetland WAG-002</p>	

**VEGETATION – Use scientific names of plants.**

<table border="1" style="width:100%"><tr><td style="width:35%"><u>Tree Stratum</u> (Plot size: <u>30</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:15%">Indicator Status</td></tr><tr><td>1. <u>Salix nigra</u></td><td align="center"><u>5</u></td><td align="center"><u>Yes</u></td><td align="center"><u>OBL</u></td></tr><tr><td>2. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td>3. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td>4. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td>5. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td align="right"><u>5</u></td><td align="center" colspan="3">=Total Cover</td></tr></table> <table border="1" style="width:100%"><tr><td style="width:35%"><u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:15%">Indicator Status</td></tr><tr><td>1. <u>Sambucus nigra</u></td><td align="center"><u>10</u></td><td align="center"><u>Yes</u></td><td align="center"><u>FAC</u></td></tr><tr><td>2. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td>3. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td>4. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td>5. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td align="right"><u>10</u></td><td align="center" colspan="3">=Total Cover</td></tr></table> <table border="1" style="width:100%"><tr><td style="width:35%"><u>Herb Stratum</u> (Plot size: <u>5</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:15%">Indicator Status</td></tr><tr><td>1. <u>Typha angustifolia</u></td><td align="center"><u>30</u></td><td align="center"><u>Yes</u></td><td align="center"><u>OBL</u></td></tr><tr><td>2. <u>Phalaris arundinacea</u></td><td align="center"><u>15</u></td><td align="center"><u>Yes</u></td><td align="center"><u>FACW</u></td></tr><tr><td>3. <u>Carex frankii</u></td><td align="center"><u>15</u></td><td align="center"><u>Yes</u></td><td align="center"><u>OBL</u></td></tr><tr><td>4. <u>Solidago altissima</u></td><td align="center"><u>10</u></td><td align="center"><u>No</u></td><td align="center"><u>FACU</u></td></tr><tr><td>5. <u>Conium maculatum</u></td><td align="center"><u>5</u></td><td align="center"><u>No</u></td><td align="center"><u>FACW</u></td></tr><tr><td>6. <u>Pastinaca sativa</u></td><td align="center"><u>5</u></td><td align="center"><u>No</u></td><td align="center"><u>UPL</u></td></tr><tr><td>7. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td>8. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td>9. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td>10. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td align="right"><u>80</u></td><td align="center" colspan="3">=Total Cover</td></tr></table> <table border="1" style="width:100%"><tr><td style="width:35%"><u>Woody Vine Stratum</u> (Plot size: <u>5</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:15%">Indicator Status</td></tr><tr><td>1. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td>2. <u>                    </u></td><td> </td><td> </td><td> </td></tr><tr><td align="right"> </td><td align="center" colspan="3">=Total Cover</td></tr></table>	<u>Tree Stratum</u> (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Salix nigra</u>	<u>5</u>	<u>Yes</u>	<u>OBL</u>	2. <u>                    </u>				3. <u>                    </u>				4. <u>                    </u>				5. <u>                    </u>				<u>5</u>	=Total Cover			<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Sambucus nigra</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	2. <u>                    </u>				3. <u>                    </u>				4. <u>                    </u>				5. <u>                    </u>				<u>10</u>	=Total Cover			<u>Herb Stratum</u> (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Typha angustifolia</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>	2. <u>Phalaris arundinacea</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>	3. <u>Carex frankii</u>	<u>15</u>	<u>Yes</u>	<u>OBL</u>	4. <u>Solidago altissima</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	5. <u>Conium maculatum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	6. <u>Pastinaca sativa</u>	<u>5</u>	<u>No</u>	<u>UPL</u>	7. <u>                    </u>				8. <u>                    </u>				9. <u>                    </u>				10. <u>                    </u>				<u>80</u>	=Total Cover			<u>Woody Vine Stratum</u> (Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>                    </u>				2. <u>                    </u>					=Total Cover			<p><b>Dominance Test worksheet:</b></p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>5</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)</p> <p><b>Prevalence Index worksheet:</b></p> <table border="1" style="width:100%"><tr><td align="center" colspan="2">Total % Cover of:</td><td align="center" colspan="2">Multiply by:</td></tr><tr><td>OBL species</td><td align="center"><u>50</u></td><td>x 1 =</td><td align="center"><u>50</u></td></tr><tr><td>FACW species</td><td align="center"><u>20</u></td><td>x 2 =</td><td align="center"><u>40</u></td></tr><tr><td>FAC species</td><td align="center"><u>10</u></td><td>x 3 =</td><td align="center"><u>30</u></td></tr><tr><td>FACU species</td><td align="center"><u>10</u></td><td>x 4 =</td><td align="center"><u>40</u></td></tr><tr><td>UPL species</td><td align="center"><u>5</u></td><td>x 5 =</td><td align="center"><u>25</u></td></tr><tr><td>Column Totals:</td><td align="center"><u>95</u> (A)</td><td></td><td align="center"><u>185</u> (B)</td></tr><tr><td align="center" colspan="4">Prevalence Index = B/A = <u>1.95</u></td></tr></table> <p><b>Hydrophytic Vegetation Indicators:</b></p> <p><u>    </u> 1 - Rapid Test for Hydrophytic Vegetation</p> <p><u>X</u> 2 - Dominance Test is &gt;50%</p> <p><u>X</u> 3 - Prevalence Index is ≤3.0<sup>1</sup></p> <p><u>    </u> 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)</p> <p><u>    </u> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)</p> <p><sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p><b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No <u>    </u></p>	Total % Cover of:		Multiply by:		OBL species	<u>50</u>	x 1 =	<u>50</u>	FACW species	<u>20</u>	x 2 =	<u>40</u>	FAC species	<u>10</u>	x 3 =	<u>30</u>	FACU species	<u>10</u>	x 4 =	<u>40</u>	UPL species	<u>5</u>	x 5 =	<u>25</u>	Column Totals:	<u>95</u> (A)		<u>185</u> (B)	Prevalence Index = B/A = <u>1.95</u>			
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## SOIL

Sampling Point: Dp-WAG-002

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text" value="2"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text" value="1"/>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<input type="text" value="0"/>
(includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
Wetland hydrology indicators are present			



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

**OMB Control #: 0710-0024, Exp:11/30/2024**  
**Requirement Control Symbol EXEMPT:**  
**(Authority: AR 335-15, paragraph 5-2a)**

Project/Site: New Westville Project City/County: Preble Sampling Date: 06/12/23  
Applicant/Owner: AES Ohio State: OH Sampling Point: Dp-UPL-WAG-002  
Investigator(s): A. Glenn Section, Township, Range: S14 T9N R2E  
Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): none  
Slope (%): 1 Lat: 39.8782183° Long: -84.6148810° Datum: NAD83  
Soil Map Unit Name: KoA: Kokomo silty clay loam, 0 to 1 percent slopes (622565) NWI classification: N/A  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No       
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

<p>Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u></p>	<p><b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u></p>
<p>Remarks: Upland data point for Wetland WAG-002</p>	

**VEGETATION – Use scientific names of plants.**

<table border="1" style="width:100%"><tr><td style="width:30%"><u>Tree Stratum</u> (Plot size: <u>30</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:10%">Indicator Status</td></tr><tr><td>1. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>2. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>3. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>4. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>5. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td colspan="2"><u>    </u> =Total Cover</td><td colspan="2"></td></tr></table> <table border="1" style="width:100%"><tr><td style="width:30%"><u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:10%">Indicator Status</td></tr><tr><td>1. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>2. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>3. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>4. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>5. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td colspan="2"><u>    </u> =Total Cover</td><td colspan="2"></td></tr></table> <table border="1" style="width:100%"><tr><td style="width:30%"><u>Herb Stratum</u> (Plot size: <u>5</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:10%">Indicator Status</td></tr><tr><td>1. <u>Festuca rubra</u></td><td><u>60</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr><tr><td>2. <u>Plantago lanceolata</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>3. <u>Taraxacum officinale</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>4. <u>Trifolium repens</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>5. <u>Conium maculatum</u></td><td><u>5</u></td><td><u>No</u></td><td><u>FACW</u></td></tr><tr><td>6. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>7. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>8. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>9. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>10. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td colspan="2"><u>95</u> =Total Cover</td><td colspan="2"></td></tr></table> <table border="1" style="width:100%"><tr><td style="width:30%"><u>Woody Vine Stratum</u> (Plot size: <u>5</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:10%">Indicator Status</td></tr><tr><td>1. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>2. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td colspan="2"><u>    </u> =Total Cover</td><td colspan="2"></td></tr></table>	<u>Tree Stratum</u> (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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## SOIL

Sampling Point: Dp-UPL-WAG-002

<b>Profile Description:</b> (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
<u>Depth (inches)</u>	<u>Matrix</u>		<u>Redox Features</u>				<u>Texture</u>	<u>Remarks</u>
	<u>Color (moist)</u>	<u>%</u>	<u>Color (moist)</u>	<u>%</u>	<u>Type<sup>1</sup></u>	<u>Loc<sup>2</sup></u>		
0-16	10YR 3/4	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

### Hydric Soil Indicators:

- ☐ Histosol (A1)                  ☐ Sandy Gleyed Matrix (S4)
- ☐ Histic Epipedon (A2)        ☐ Sandy Redox (S5)
- ☐ Black Histic (A3)             ☐ Stripped Matrix (S6)
- ☐ Hydrogen Sulfide (A4)      ☐ Dark Surface (S7)
- ☐ Stratified Layers (A5)      ☐ Loamy Mucky Mineral (F1)
- ☐ 2 cm Muck (A10)             ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Below Dark Surface (A11)    ☐ Depleted Matrix (F3)
- ☐ Thick Dark Surface (A12)    ☐ Redox Dark Surface (F6)
- ☐ Sandy Mucky Mineral (S1)    ☐ Depleted Dark Surface (F7)
- ☐ 5 cm Mucky Peat or Peat (S3)    ☐ Redox Depressions (F8)

### Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ Coast Prairie Redox (A16)
- ☐ Iron-Manganese Masses (F12)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (F22)
- ☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b>	<b>Hydric Soil Present?</b>
Type: _____ N/A	
Depth (inches): _____	Yes ____ No X

Remarks:  
 Hydric soil is absent

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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Wetland hydrology indicators are absent			



OMB Control #: 0710-0024, Exp:11/30/2024  
Requirement Control Symbol EXEMPT:  
(Authority: AR 335-15, paragraph 5-2a)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Hydric Soil Present?                    Yes <u>  X  </u> No <u>      </u>	
Wetland Hydrology Present?          Yes <u>  X  </u> No <u>      </u>	
Remarks: Data point for Wetland WAG-003	

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
(Plot size: 30 )				
1.	<i>Fraxinus pennsylvanica</i>	10	Yes	FACW
2.	<i>Acer saccharinum</i>	10	Yes	FACW
3.				
4.				
5.				
		20	=Total Cover	
Sapling/Shrub Stratum				
(Plot size: 15 )				
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Herb Stratum				
(Plot size: 5 )				
1.	<i>Phalaris arundinacea</i>	60	Yes	FACW
2.	<i>Carex frankii</i>	20	Yes	OBL
3.	<i>Urtica dioica</i>	5	No	FACW
4.	<i>Conium maculatum</i>	5	No	FACW
5.	<i>Toxicodendron radicans</i>	5	No	FAC
6.				
7.				
8.				
9.				
10.				
		95	=Total Cover	
Woody Vine Stratum				
(Plot size: 5 )				
1.				
2.				
			=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species 20	x 1 = 20
FACW species 90	x 2 = 180
FAC species 5	x 3 = 15
FACU species 0	x 4 = 0
UPL species 0	x 5 = 0
Column Totals: 115 (A)	215 (B)
Prevalence Index = B/A = 1.87	

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0<sup>1</sup>

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: Dp-WAG-003

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Wetland hydrology indicators are present			



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

**OMB Control #: 0710-0024, Exp:11/30/2024**  
**Requirement Control Symbol EXEMPT:**  
**(Authority: AR 335-15, paragraph 5-2a)**

Project/Site: New Westville Project City/County: Preble Sampling Date: 06/13/23  
Applicant/Owner: AES Ohio State: OH Sampling Point: Dp-UPL-WAG-003  
Investigator(s): A. Glenn Section, Township, Range: S11 T9N R2E  
Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): none  
Slope (%): 1 Lat: 39.887682° Long: -84.614840° Datum: NAD83  
Soil Map Unit Name: KoA: Kokomo silty clay loam, 0 to 1 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No     

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <u>    </u>	No <u>X</u>
Hydric Soil Present?	Yes <u>    </u>	No <u>X</u>
Wetland Hydrology Present?	Yes <u>    </u>	No <u>X</u>

<b>Is the Sampled Area</b>		
<b>within a Wetland?</b>	Yes <u>    </u>	No <u>X</u>

**Remarks:**

Upland data point for Wetland WAG-003

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15</u> )			
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Herb Stratum	(Plot size: <u>5</u> )			
1. <u>Glycine max</u>		<u>30</u>	<u>Yes</u>	<u>UPL</u>
2. <u>Echinochloa crus-galli</u>		<u>20</u>	<u>Yes</u>	<u>FACW</u>
3. <u>Alliaria petiolata</u>		<u>10</u>	<u>No</u>	<u>FAC</u>
4. <u>Stellaria media</u>		<u>10</u>	<u>No</u>	<u>FACU</u>
5. <u>Vernonia gigantea</u>		<u>10</u>	<u>No</u>	<u>FAC</u>
6.				
7.				
8.				
9.				
10.				
		<u>80</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>5</u> )			
1.				
2.				
			=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>20</u>	x 2 = <u>40</u>
FAC species <u>20</u>	x 3 = <u>60</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species <u>30</u>	x 5 = <u>150</u>
Column Totals: <u>80</u> (A)	<u>290</u> (B)
Prevalence Index = B/A = <u>3.63</u>	

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation

     2 - Dominance Test is >50%

     3 - Prevalence Index is ≤3.0<sup>1</sup>

     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes      No X

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: Dp-UPL-WAG-003

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 4/3	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: <u>                    </u> N/A Depth (inches): <u>                    </u>	<b>Hydric Soil Present?</b> Yes <u>      </u> No <u>  X  </u>
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Remarks:  
Hydric soil is absent

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <u>      </u> No <u>  X  </u> Depth (inches): <u>          </u> Water Table Present?      Yes <u>      </u> No <u>  X  </u> Depth (inches): <u>          </u> Saturation Present?        Yes <u>      </u> No <u>  X  </u> Depth (inches): <u>          </u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>      </u> No <u>  X  </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Wetland hydrology indicators are absent



OMB Control #: 0710-0024, Exp:11/30/2024  
Requirement Control Symbol EXEMPT:  
(Authority: AR 335-15, paragraph 5-2a)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <u>  X  </u>	No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b>	<b>Yes <u>  X  </u></b>	<b>No <u>      </u></b>
Hydric Soil Present?	Yes <u>  X  </u>	No <u>      </u>			
Wetland Hydrology Present?	Yes <u>  X  </u>	No <u>      </u>			
Remarks: Data point for wetland WAG-005					

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
(Plot size: 30 )				
1.	<i>Salix nigra</i>	5	Yes	OBL
2.	<i>Fraxinus pennsylvanica</i>	5	Yes	FACW
3.	<i>Pyrus calleryana</i>	5	Yes	UPL
4.				
5.				
		15	=Total Cover	
Sapling/Shrub Stratum				
(Plot size: 15 )				
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Herb Stratum				
(Plot size: 5 )				
1.	<i>Typha angustifolia</i>	40	Yes	OBL
2.	<i>Phalaris arundinacea</i>	10	Yes	FACW
3.	<i>Phragmites australis</i>	10	Yes	FACW
4.	<i>Toxicodendron radicans</i>	10	Yes	FAC
5.	<i>Conium maculatum</i>	10	Yes	FACW
6.	<i>Scirpus atrovirens</i>	5	No	OBL
7.				
8.				
9.				
10.				
		85	=Total Cover	
Woody Vine Stratum				
(Plot size: 5 )				
1.				
2.				
			=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 87.5% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species 50	x 1 = 50
FACW species 35	x 2 = 70
FAC species 10	x 3 = 30
FACU species 0	x 4 = 0
UPL species 5	x 5 = 25
Column Totals: 100 (A)	175 (B)
Prevalence Index = B/A = 1.75	

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0<sup>1</sup>

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: Dp-WAG-005

<b>Profile Description:</b> (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
<b>Depth (inches)</b>	<b>Matrix</b>		<b>Redox Features</b>				<b>Texture</b>	<b>Remarks</b>
	<b>Color (moist)</b>	<b>%</b>	<b>Color (moist)</b>	<b>%</b>	<b>Type<sup>1</sup></b>	<b>Loc<sup>2</sup></b>		
0-16	10YR 5/1	80	10YR 4/6	20	C	M	Loamy/Clayey	Prominent redox concentrations
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.							<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
<b>Hydric Soil Indicators:</b>							<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Gleyed Matrix (S4)				<input type="checkbox"/> Coast Prairie Redox (A16)	
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Sandy Redox (S5)				<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Stripped Matrix (S6)				<input type="checkbox"/> Red Parent Material (F21)	
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Dark Surface (S7)				<input type="checkbox"/> Very Shallow Dark Surface (F22)	
<input type="checkbox"/> Stratified Layers (A5)			<input type="checkbox"/> Loamy Mucky Mineral (F1)				<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 2 cm Muck (A10)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)					
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input checked="" type="checkbox"/> Depleted Matrix (F3)					
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)				<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			<input checked="" type="checkbox"/> Redox Depressions (F8)					
<b>Restrictive Layer (if observed):</b>								
Type: _____ N/A								
Depth (inches): _____						<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: Hydric soil indicators present								

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>3</u>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>2</u>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>12</u>
(includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
Wetland hydrology indicators are present			



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

**OMB Control #: 0710-0024, Exp:11/30/2024**  
**Requirement Control Symbol EXEMPT:**  
**(Authority: AR 335-15, paragraph 5-2a)**

Project/Site: New Westville Project City/County: Preble Sampling Date: 06/14/23  
Applicant/Owner: AES Ohio State: OH Sampling Point: Dp-UPL-WAG-005  
Investigator(s): A. Glenn Section, Township, Range: S4 T8N R1E  
Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): none  
Slope (%): 1 Lat: 39.825888° Long: -84.760603° Datum: NAD83  
Soil Map Unit Name: MfB2: Miamian-Celina silt loams, 2 to 6 percent slopes NWI classification: N/A  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No       
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

<table><tr><td>Hydrophytic Vegetation Present?</td><td>Yes <u>    </u></td><td>No <u>X</u></td></tr><tr><td>Hydric Soil Present?</td><td>Yes <u>    </u></td><td>No <u>X</u></td></tr><tr><td>Wetland Hydrology Present?</td><td>Yes <u>    </u></td><td>No <u>X</u></td></tr></table>	Hydrophytic Vegetation Present?	Yes <u>    </u>	No <u>X</u>	Hydric Soil Present?	Yes <u>    </u>	No <u>X</u>	Wetland Hydrology Present?	Yes <u>    </u>	No <u>X</u>	<table><tr><td><b>Is the Sampled Area within a Wetland?</b></td><td>Yes <u>    </u></td><td>No <u>X</u></td></tr></table>	<b>Is the Sampled Area within a Wetland?</b>	Yes <u>    </u>	No <u>X</u>
Hydrophytic Vegetation Present?	Yes <u>    </u>	No <u>X</u>											
Hydric Soil Present?	Yes <u>    </u>	No <u>X</u>											
Wetland Hydrology Present?	Yes <u>    </u>	No <u>X</u>											
<b>Is the Sampled Area within a Wetland?</b>	Yes <u>    </u>	No <u>X</u>											
<div>Remarks: Upland data point for Wetland WAG-005</div>													

**VEGETATION – Use scientific names of plants.**

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## SOIL

Sampling Point: Dp-UPL-WAG-005

<b>Profile Description:</b> (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 4/4	100					Loamy/Clayey	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.							<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
<b>Hydric Soil Indicators:</b>							<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Coast Prairie Redox (A16)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> Iron-Manganese Masses (F12)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (F21)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Dark Surface (S7)			<input type="checkbox"/> Very Shallow Dark Surface (F22)		
<input type="checkbox"/> Stratified Layers (A5)			<input type="checkbox"/> Loamy Mucky Mineral (F1)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> 2 cm Muck (A10)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)					
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)					
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)			<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			<input type="checkbox"/> Redox Depressions (F8)					
<b>Restrictive Layer (if observed):</b>								
Type: _____ N/A						<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>		
Depth (inches): _____								
Remarks: Hydric soil is absent								

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Wetland hydrology indicators are absent			



OMB Control #: 0710-0024, Exp:11/30/2024  
Requirement Control Symbol EXEMPT:  
(Authority: AR 335-15, paragraph 5-2a)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?                    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?        Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: Data point for PEM wetland WAG-006	

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
(Plot size: 30 )				
1.	<i>Salix nigra</i>	5	Yes	OBL
2.	<i>Fraxinus pennsylvanica</i>	5	Yes	FACW
3.	<i>Ulmus americana</i>	5	Yes	FACW
4.				
5.				
		15	=Total Cover	
Sapling/Shrub Stratum				
(Plot size: 15 )				
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Herb Stratum				
(Plot size: 5 )				
1.	<i>Typha angustifolia</i>	30	Yes	OBL
2.	<i>Solidago altissima</i>	20	Yes	FACU
3.	<i>Conium maculatum</i>	15	No	FACW
4.	<i>Phalaris arundinacea</i>	10	No	FACW
5.	<i>Acorus americanus</i>	10	No	OBL
6.				
7.				
8.				
9.				
10.				
		85	=Total Cover	
Woody Vine Stratum				
(Plot size: 5 )				
1.				
2.				
			=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species 45	x 1 = 45
FACW species 35	x 2 = 70
FAC species 0	x 3 = 0
FACU species 20	x 4 = 80
UPL species 0	x 5 = 0
Column Totals: 100 (A)	195 (B)
Prevalence Index = B/A = 1.95	

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0<sup>1</sup>

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: WAG-006

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>1</u>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>2</u>
Saturation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	<u>10</u>
(includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
Wetland hydrology indicators are present			



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

**OMB Control #: 0710-0024, Exp:11/30/2024**  
**Requirement Control Symbol EXEMPT:**  
**(Authority: AR 335-15, paragraph 5-2a)**

Project/Site: New Westville Project City/County: Preble Sampling Date: 06/16/23  
Applicant/Owner: AES Ohio State: OH Sampling Point: DP-UPL-WAG-006  
Investigator(s): A. Glenn Section, Township, Range: S4 T8N R1E  
Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): none  
Slope (%): 0 Lat: 39.825890° Long: -84.760604 Datum: NAD83  
Soil Map Unit Name: MfB2: Miamian-Celina silt loams, 2 to 6 percent slopes, eroded NWI classification: N/A  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No       
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

<p>Hydrophytic Vegetation Present? Yes <u>    </u> No <u>X</u> Hydric Soil Present? Yes <u>    </u> No <u>X</u> Wetland Hydrology Present? Yes <u>    </u> No <u>X</u></p>	<p><b>Is the Sampled Area within a Wetland?</b> Yes <u>    </u> No <u>X</u></p>
<p>Remarks: Upland data point for PEM wetland WAG-006</p>	

**VEGETATION – Use scientific names of plants.**

<table border="1" style="width:100%"><tr><td style="width:35%"><u>Tree Stratum</u> (Plot size: <u>30</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:35%">Indicator Status</td></tr><tr><td>1. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>2. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>3. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>4. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>5. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td colspan="2"><u>    </u> =Total Cover</td><td colspan="2"></td></tr></table> <table border="1" style="width:100%"><tr><td style="width:35%"><u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:35%">Indicator Status</td></tr><tr><td>1. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>2. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>3. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>4. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>5. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td colspan="2"><u>    </u> =Total Cover</td><td colspan="2"></td></tr></table> <table border="1" style="width:100%"><tr><td style="width:35%"><u>Herb Stratum</u> (Plot size: <u>5</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:35%">Indicator Status</td></tr><tr><td>1. <u>Festuca rubra</u></td><td><u>50</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr><tr><td>2. <u>Trifolium pratense</u></td><td><u>20</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr><tr><td>3. <u>Plantago lanceolata</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>4. <u>Taraxacum officinale</u></td><td><u>10</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>5. <u>Stellaria media</u></td><td><u>5</u></td><td><u>No</u></td><td><u>FACU</u></td></tr><tr><td>6. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>7. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>8. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>9. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>10. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td colspan="2"><u>95</u> =Total Cover</td><td colspan="2"></td></tr></table> <table border="1" style="width:100%"><tr><td style="width:35%"><u>Woody Vine Stratum</u> (Plot size: <u>5</u> )</td><td style="width:15%">Absolute % Cover</td><td style="width:15%">Dominant Species?</td><td style="width:35%">Indicator Status</td></tr><tr><td>1. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td>2. <u>    </u></td><td><u>    </u></td><td><u>    </u></td><td><u>    </u></td></tr><tr><td colspan="2"><u>    </u> =Total Cover</td><td colspan="2"></td></tr></table>	<u>Tree Stratum</u> (Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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## SOIL

Sampling Point: DP-UPL-WAG-006

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 3/4	100						

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.
<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ N/A Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
---	---

Remarks:  
 Hydric soil indicators are absent

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
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<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Wetland hydrology indicators are absent			



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

**OMB Control #: 0710-0024, Exp:11/30/2024**  
**Requirement Control Symbol EXEMPT:**  
**(Authority: AR 335-15, paragraph 5-2a)**

Project/Site: New Westville Project City/County: Preble Sampling Date: 6/15/23  
Applicant/Owner: AES Ohio State: OH Sampling Point: WAG-007  
Investigator(s): A. Glenn Section, Township, Range: S4 T8N R1E  
Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave  
Slope (%): 5 Lat: 39.825747 Long: -84.779565 Datum: NAD83  
Soil Map Unit Name: KnA: Kokomo silt loam, 0 to 1 percent slopes NWI classification: N/A  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No       
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes X No       
Hydric Soil Present? Yes X No       
Wetland Hydrology Present? Yes X No     

**Is the Sampled Area  
within a Wetland?** Yes X No     

Remarks:

Data point for PEM wetland WAG-007

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>		<u>20</u>	<u>Yes</u>	<u>OBL</u>
2. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
3. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
4. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
5. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
		<u>20</u>	=Total Cover	

Sapling/Shrub Stratum	(Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>		<u>15</u>	<u>Yes</u>	<u>OBL</u>
2. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
3. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
4. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
5. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
		<u>15</u>	=Total Cover	

Herb Stratum	(Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Typha angustifolia</u>		<u>70</u>	<u>Yes</u>	<u>OBL</u>
2. <u>Solidago canadensis</u>		<u>15</u>	<u>No</u>	<u>FACU</u>
3. <u>Phalaris arundinacea</u>		<u>15</u>	<u>No</u>	<u>FACW</u>
4. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
5. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
6. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
7. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
8. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
9. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
10. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
		<u>100</u>	=Total Cover	

Woody Vine Stratum	(Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
2. <u>    </u>		<u>    </u>	<u>    </u>	<u>    </u>
		<u>    </u>	=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That  
Are OBL, FACW, or FAC: 3 (A)  
Total Number of Dominant  
Species Across All Strata: 3 (B)  
Percent of Dominant Species That  
Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>105</u>	x 1 = <u>105</u>
FACW species <u>15</u>	x 2 = <u>30</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>15</u>	x 4 = <u>60</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>135</u> (A)	<u>195</u> (B)
Prevalence Index = B/A = <u>1.44</u>	

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation  
X 2 - Dominance Test is >50%  
X 3 - Prevalence Index is ≤3.0<sup>1</sup>  
     4 - Morphological Adaptations<sup>1</sup> (Provide supporting  
data in Remarks or on a separate sheet)  
     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must  
be present, unless disturbed or problematic.

**Hydrophytic  
Vegetation  
Present?**

Yes X No     

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: WAG-007

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 4/1	80	10YR 5/6	20	C	M	Loamy/Clayey	Prominent redox concentrations
10-16								Restrictive layer

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input checked="" type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: <u>imperivous gravel/rock</u> Depth (inches): <u>10</u>	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicators present

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Water Table Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3</u> Saturation Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Wetland hydrology indicators are present



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

**OMB Control #: 0710-0024, Exp:11/30/2024**  
**Requirement Control Symbol EXEMPT:**  
**(Authority: AR 335-15, paragraph 5-2a)**

Project/Site: New Westville Project City/County: Preble Sampling Date: 06/16/23  
Applicant/Owner: AES Ohio State: OH Sampling Point: DP-UPL-WAG-007  
Investigator(s): A. Glenn Section, Township, Range: S4 T8N R1E  
Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): convex  
Slope (%): 10 Lat: 39.825768 Long: -84.779615 Datum: NAD83  
Soil Map Unit Name: KnA: Kokomo silt loam, 0 to 1 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No     

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes      No X  
Hydric Soil Present? Yes      No X  
Wetland Hydrology Present? Yes      No X

**Is the Sampled Area  
within a Wetland?** Yes      No X

**Remarks:**

Upland data point for PEM wetland WAG-007

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15</u> )			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5</u> )			
1. <u>Festuca rubra</u>		<u>50</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Plantago lanceolata</u>		<u>10</u>	<u>No</u>	<u>FACU</u>
3. <u>Taraxacum officinale</u>		<u>10</u>	<u>No</u>	<u>FACU</u>
4. <u>Dipsacus fullonum</u>		<u>10</u>	<u>No</u>	<u>FACU</u>
5.				
6.				
7.				
8.				
9.				
10.				
		<u>80</u> =Total Cover		
Woody Vine Stratum	(Plot size: <u>5</u> )			
1.				
2.				
		=Total Cover		

**Dominance Test worksheet:**

Number of Dominant Species That  
Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant  
Species Across All Strata: 1 (B)

Percent of Dominant Species That  
Are OBL, FACW, or FAC: 0.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>80</u>	x 4 = <u>320</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>80</u> (A)	<u>320</u> (B)
Prevalence Index = B/A = <u>4.00</u>	

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation

     2 - Dominance Test is >50%

     3 - Prevalence Index is ≤3.0<sup>1</sup>

     4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes      No X

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: DP-UPL-WAG-007

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 3/3	100						Silty loam
12-16								Restrictive layer

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: <u>Gravel, rock</u> Depth (inches): <u>12</u>	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
Hydric soil indicators are absent

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>          </u> Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>          </u> Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>          </u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Wetland hydrology indicators are absent



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

**OMB Control #: 0710-0024, Exp:11/30/2024**  
**Requirement Control Symbol EXEMPT:**  
**(Authority: AR 335-15, paragraph 5-2a)**

Project/Site: New Westville Project City/County: Preble Sampling Date: 10/18/23  
Applicant/Owner: AES Ohio State: OH Sampling Point: WAG-008  
Investigator(s): A. Glenn Section, Township, Range: S3 T8N R1E  
Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave  
Slope (%): 0 Lat: 39.825165 Long: -84.758643 Datum: NAD83  
Soil Map Unit Name: WnA: Westland silt loam, 0 to 2 percent slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No     

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes X No       
Hydric Soil Present? Yes X No       
Wetland Hydrology Present? Yes X No     

**Is the Sampled Area  
within a Wetland?** Yes X No     

Remarks:

Data point for PEM wetland WAG-008

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>		<u>5</u>	<u>Yes</u>	<u>OBL</u>
2. <u>Fraxinus pennsylvanica</u>		<u>5</u>	<u>Yes</u>	<u>FACW</u>
3. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
4. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
5. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
		<u>10</u>	=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15</u> )			
1. <u>Fraxinus pennsylvanica</u>		<u>10</u>	<u>Yes</u>	<u>FACW</u>
2. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
3. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
4. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
5. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
		<u>10</u>	=Total Cover	
Herb Stratum	(Plot size: <u>5</u> )			
1. <u>Impatiens capensis</u>		<u>40</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Phalaris arundinacea</u>		<u>35</u>	<u>Yes</u>	<u>FACW</u>
3. <u>Typha angustifolia</u>		<u>10</u>	<u>No</u>	<u>OBL</u>
4. <u>Symphyotrichum lanceolatum</u>		<u>5</u>	<u>No</u>	<u>FAC</u>
5. <u>Apocynum cannabinum</u>		<u>5</u>	<u>No</u>	<u>FAC</u>
6. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
7. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
8. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
9. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
10. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
		<u>95</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>5</u> )			
1. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
2. <u>                                    </u>		<u>          </u>	<u>          </u>	<u>          </u>
		<u>          </u>	=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That  
Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant  
Species Across All Strata: 5 (B)

Percent of Dominant Species That  
Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>15</u>	x 1 = <u>15</u>
FACW species <u>90</u>	x 2 = <u>180</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>115</u> (A)	<u>225</u> (B)
Prevalence Index = B/A = <u>1.96</u>	

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0<sup>1</sup>

     4 - Morphological Adaptations<sup>1</sup> (Provide supporting  
data in Remarks or on a separate sheet)

     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must  
be present, unless disturbed or problematic.

**Hydrophytic  
Vegetation  
Present?** Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: WAG-008

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Wetland hydrology indicators are present			



**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

**OMB Control #: 0710-0024, Exp:11/30/2024**  
**Requirement Control Symbol EXEMPT:**  
**(Authority: AR 335-15, paragraph 5-2a)**

Project/Site: New Westville Project City/County: Preble Sampling Date: 10/18/23  
Applicant/Owner: AES Ohio State: OH Sampling Point: DP-UPL-WAG-008  
Investigator(s): A. Glenn Section, Township, Range: S3 T8N R1E  
Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): convex  
Slope (%): 0 Lat: 39.825174 Long: -84.758385 Datum: NAD83  
Soil Map Unit Name: WnA: Westland silt loam, 0 to 2 percent slopes NWI classification: N/A  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No      (If no, explain in Remarks.)  
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No       
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes      No X  
Hydric Soil Present? Yes      No X  
Wetland Hydrology Present? Yes      No X

**Is the Sampled Area  
within a Wetland?** Yes      No X

**Remarks:**

Upland data point for PEM wetland WAG-008

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		

Herb Stratum	(Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Festuca rubra</u>		<u>70</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Glechoma hederacea</u>		<u>10</u>	<u>No</u>	<u>FACU</u>
3. <u>Cirsium arvense</u>		<u>5</u>	<u>No</u>	<u>FACU</u>
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		<u>85</u> =Total Cover		

Woody Vine Stratum	(Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
		=Total Cover		

**Dominance Test worksheet:**

Number of Dominant Species That  
Are OBL, FACW, or FAC: 0 (A)  
Total Number of Dominant  
Species Across All Strata: 1 (B)  
Percent of Dominant Species That  
Are OBL, FACW, or FAC: 0.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>85</u>	x 4 = <u>340</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>85</u> (A)	<u>340</u> (B)
Prevalence Index = B/A = <u>4.00</u>	

**Hydrophytic Vegetation Indicators:**

     1 - Rapid Test for Hydrophytic Vegetation  
     2 - Dominance Test is >50%  
     3 - Prevalence Index is ≤3.0<sup>1</sup>  
     4 - Morphological Adaptations<sup>1</sup> (Provide supporting  
data in Remarks or on a separate sheet)  
     Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must  
be present, unless disturbed or problematic.

**Hydrophytic  
Vegetation  
Present?**

Yes      No X

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: DP-UPL-WAG-008

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Wetland hydrology indicators are absent			



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/12/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-001</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>	Section, Township, Range: <u>12 9N 2E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>0-1</u>	Lat: <u>39.8978227°</u>	Long: <u>-84.6148472°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Kokomo silty clay loam</u>		NWI classification: <u>NA</u>
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  Y  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?                    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?          Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All three wetland parameters are present at DP-WSJ-001; this area is a wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. The wetland area consists of a utility right-of-way.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>  30  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Quercus macrocarpa</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">15</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>  15  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Fraxinus pennsylvanica</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">20</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>  5  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Carex blanda</u></td><td></td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. <u>Carex grayi</u></td><td></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. <u>Carex shortiana</u></td><td></td><td style="text-align: center;">25</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>4. <u>Schedonorus arundinaceus</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>5. <u>Oenothera biennis</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>6. <u>Oxalis stricta</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>7. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">115</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>  15  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Toxicodendron radicans</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">15</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table>	Tree Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Quercus macrocarpa</u>		15	Yes	FAC	2. _____					3. _____					4. _____					5. _____							15	=Total Cover		Sapling/Shrub Stratum	(Plot size: <u>  15  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Fraxinus pennsylvanica</u>		20	Yes	FACW	2. _____					3. _____					4. _____					5. _____							20	=Total Cover		Herb Stratum	(Plot size: <u>  5  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Carex blanda</u>		40	Yes	FAC	2. <u>Carex grayi</u>		30	Yes	FACW	3. <u>Carex shortiana</u>		25	Yes	FACW	4. <u>Schedonorus arundinaceus</u>		10	No	FACU	5. <u>Oenothera biennis</u>		5	No	FACU	6. <u>Oxalis stricta</u>		5	No	FACU	7. _____					8. _____					9. _____					10. _____							115	=Total Cover		Woody Vine Stratum	(Plot size: <u>  15  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Toxicodendron radicans</u>		15	Yes	FAC	2. _____							15	=Total Cover		<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>      6      </u> (A) Total Number of Dominant Species Across All Strata: <u>      6      </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>  100.0%  </u> (A/B)
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Remarks: (Include photo numbers here or on a separate sheet.) The dominance test and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-001.																																																																																																																																																							



## SOIL

Sampling Point: DP-WSJ-001

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 3/1	95	10YR 3/3	5	C	PL	Loamy/Clayey	clay loam
10-18	10YR 4/1	80	10YR 4/4	20	D	M	Loamy/Clayey	clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input checked="" type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
One hydric soil indicator redox dark surface (F6) is met. One indicator of problematic hydric soil F12 iron-manganese masses is met. The soil is not hydric at DP-WSJ-001.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One primary (oxidized rhizospheres on living roots) indicator and two secondary (FAC-Neutral Test & Geomorphic Position) indicators of wetland hydrology are observed. This area is a Depresion. There is wetland hydrology at DP-WSJ-001.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/12/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-001-1</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		Section, Township, Range: <u>12 9N 2E</u>
Landform (hillside, terrace, etc.): <u>terrace</u>		Local relief (concave, convex, none): <u>none</u>
Slope (%): <u>0-1</u>	Lat: <u>39.8979738°</u>	Long: <u>-84.6143734°</u>
Soil Map Unit Name: <u>Kokomo silty clay loam</u>		Datum: <u>NAD 83 OH.S</u>
Soil NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>X</u> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>X</u> No <u>      </u>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>X</u> Hydric Soil Present?    Yes <u>      </u> No <u>X</u> Wetland Hydrology Present?    Yes <u>      </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>X</u>
Remarks: Wetland parameters are not Present at DP-UPL-WSJ-001-1. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Stormwater input into this wetland.	

**VEGETATION – Use scientific names of plants.**

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FACW species <u>20</u>	x 2 = <u>40</u>																																																																																																																																																																						
FAC species <u>85</u>	x 3 = <u>255</u>																																																																																																																																																																						
FACU species <u>90</u>	x 4 = <u>360</u>																																																																																																																																																																						
UPL species <u>90</u>	x 5 = <u>450</u>																																																																																																																																																																						
Column Totals: <u>285</u> (A)	<u>1105</u> (B)																																																																																																																																																																						
Prevalence Index = B/A = <u>3.88</u>																																																																																																																																																																							
Remarks: (Include photo numbers here or on a separate sheet.) No indicators of hydrophytic vegetation are met. The vegetation is not hydrophytic at DP-UPL-WSJ-001-1.																																																																																																																																																																							



## SOIL

Sampling Point: DP-UPL-WSJ-001-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 3/1	100					Loamy/Clayey	clay loam
10-18	10YR 4/1	80	10YR 4/4	20	D	M	Sandy	clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks:  
No hydric soil indicators are met. The soil is not hydric at DP-UPL-WSJ-001-1.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One secondary indicator of wetland hydrology is observed. There is not wetland hydrology at DP-UPL-WSJ-001-1.



OMB Control #: 0710-0024, Exp:11/30/2024  
Requirement Control Symbol EXEMPT:  
(Authority: AR 335-15, paragraph 5-2a)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Wetland parameters are not Present at DP-UPL-WJSJ-001-2. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Stormwater input into this wetland. Area is within a Utility Corridor; Vegetation is managed.

The dominance test is met. The vegetation is hydrophytic at DP-UPL-WSJ-001-2.



## SOIL

Sampling Point: DP-UPL-WSJ-001-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 3/2	100					Loamy/Clayey	Silty clay loam
3-10	10YR 3/1	100					Loamy/Clayey	clay loam
10-18	10YR 4/1	80	10YR 3/2	20	C	M	Loamy/Clayey	Faint redox concentrations
								Blocky

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks:  
No hydric soil indicators are met. The soil is not hydric at DP-UPL-WSJ-001-2.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No primary or secondary indicators of wetland hydrology are met. There is not wetland hydrology at DP-UPL-WSJ-001-2.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/13/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-002-1</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>	Section, Township, Range: <u>13 9N 2E</u>	
Landform (hillside, terrace, etc.): <u>streambed</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>0-2</u>	Lat: <u>39.8852326°</u>	Long: <u>-84.6147432°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Sloan silt loam</u>	NW1 classification: <u>R4ABC</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  Y  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All Three wetland parameters are present at DP-WSJ-002-1. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. The wetland area consists of a utility right-of-way and is mowed & managed.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>  30  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>  15  </u>)</th> <th></th> <th></th> <th></th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>  5  </u>)</th> <th></th> <th></th> <th></th> </tr> <tr><td>1.</td><td><u>Leersia oryzoides</u></td><td style="text-align: center;">75</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2.</td><td><u>Acorus calamus</u></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>3.</td><td><u>Carex shortiana</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">100</td> <td style="text-align: right;">=Total Cover</td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>  15  </u>)</th> <th></th> <th></th> <th></th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table>	Tree Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.					3.					4.					5.							=Total Cover			Sapling/Shrub Stratum	(Plot size: <u>  15  </u> )				1.					2.					3.					4.					5.							=Total Cover			Herb Stratum	(Plot size: <u>  5  </u> )				1.	<u>Leersia oryzoides</u>	75	Yes	OBL	2.	<u>Acorus calamus</u>	15	No	OBL	3.	<u>Carex shortiana</u>	10	No	FACW	4.					5.					6.					7.					8.					9.					10.							100	=Total Cover		Woody Vine Stratum	(Plot size: <u>  15  </u> )				1.					2.							=Total Cover			<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>      1      </u> (A)  Total Number of Dominant Species Across All Strata: <u>      1      </u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>  100.0%  </u> (A/B)
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	<b>Hydrophytic Vegetation Indicators:</b> <u>  X  </u> 1 - Rapid Test for Hydrophytic Vegetation <u>  X  </u> 2 - Dominance Test is >50% <u>  X  </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																																																																																																																																						
<b>Hydrophytic Vegetation Present?</b> Yes <u>  X  </u> No <u>      </u>																																																																																																																																																							
Remarks: (Include photo numbers here or on a separate sheet.) The rapid test, dominance test, and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-002-1.																																																																																																																																																							



# SOIL

Sampling Point: DP-WSJ-002-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR 4/1	100					Mucky Sand	sandy silt loam
7-18	10YR 4/1	80	7.5YR 3/4	20	C	PL	Mucky Sand	sandy silt loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input checked="" type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator sandy mucky mineral S1 is met. Soil is hydric at DP-WSJ-002-1.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One primary (oxidized rhizospheres on living roots) indicator and two secondary (the FAC-Neutral Test & Geomorphic Position) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-002-1. The area consists of a depressional wetland adjacent to UNT 2 to Dry Run.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/13/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-002-2</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		Section, Township, Range: <u>13 9N 2E</u>
Landform (hillside, terrace, etc.): <u>stream floodplain</u>		Local relief (concave, convex, none): <u>concave</u>
Slope (%): <u>0-2</u>	Lat: <u>39.8855511</u> °	Long: <u>-84.6146359</u> °
Soil Map Unit Name: <u>Sloan silt loam</u>		Datum: <u>NAD 83 OH.S</u>
Soil NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  Y  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All Three wetland parameters are present at DP-WSJ-002-1. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. The wetland area consists of a utility right-of-way and is mowed & managed.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>  30  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>  15  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>  5  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Acorus americanus</u></td><td style="text-align: center;">45</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2.</td><td><u>Ambrosia trifida</u></td><td style="text-align: center;">35</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>3.</td><td><u>Glechoma hederacea</u></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4.</td><td><u>Rumex crispus</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>5.</td><td><u>Oenothera biennis</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>6.</td><td><u>Vernonia gigantea</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">110</td> <td colspan="2" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>  15  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table>	Tree Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.					3.					4.					5.							=Total Cover			Sapling/Shrub Stratum	(Plot size: <u>  15  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.					3.					4.					5.							=Total Cover			Herb Stratum	(Plot size: <u>  5  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1.	<u>Acorus americanus</u>	45	Yes	OBL	2.	<u>Ambrosia trifida</u>	35	Yes	FAC	3.	<u>Glechoma hederacea</u>	15	No	FACU	4.	<u>Rumex crispus</u>	5	No	FAC	5.	<u>Oenothera biennis</u>	5	No	FACU	6.	<u>Vernonia gigantea</u>	5	No	FAC	7.					8.					9.					10.							110	=Total Cover		Woody Vine Stratum	(Plot size: <u>  15  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.							=Total Cover			<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>      2      </u> (A)  Total Number of Dominant Species Across All Strata: <u>      2      </u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>  100.0%  </u> (A/B)
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					<b>Hydrophytic Vegetation Indicators:</b> <u>      </u> 1 - Rapid Test for Hydrophytic Vegetation <u>  X  </u> 2 - Dominance Test is >50% <u>  X  </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																																																																																																																																		
					<b>Hydrophytic Vegetation Present?</b> Yes <u>  X  </u> No <u>      </u>																																																																																																																																																		
Remarks: (Include photo numbers here or on a separate sheet.) The dominance test and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-002-2.																																																																																																																																																							



## SOIL

Sampling Point: DP-WSJ-002-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 3/1	100					Loamy/Clayey	clay loam
10-18	10YR 4/1	95	10YR 3/6	5	C	PL	Loamy/Clayey	clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicators depleted below dark surface A11 and depleted matrix F3 are met. Soil is hydric at DP-WSJ-002-2.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
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<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One primary (oxidized rhizospheres on living roots) indicator and three secondary (the FAC-Neutral Test, Geomorphic Position, and Crayfish Burrows) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-002-2. The area consists of a depressional PEM wetland adjacent to UNT 2 to Dry Run.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/13/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-002-1</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>13 9N 2E</u>	
Landform (hillside, terrace, etc.): <u>toe slope</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>0-2</u>	Lat: <u>39.8851647°</u>	Long: <u>-84.6147809°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Sloan silt loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>X</u> (If no, explain in Remarks.)		
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>X</u>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>X</u> Hydric Soil Present?    Yes <u>      </u> No <u>X</u> Wetland Hydrology Present?    Yes <u>X</u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>X</u>
Remarks: Aside from Hydrology, Wetland parameters are not Present at DP-UPL-WSJ-002-1. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is part of a Utility Corridor; Vegetation is mowed and Managed.	

**VEGETATION – Use scientific names of plants.**

<table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Tree Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>30</u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Sapling/Shrub Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>15</u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Herb Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>5</u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Bromus inermis</u></td><td style="text-align: center;">50</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2.</td><td><u>Glechoma hederacea</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>3.</td><td><u>Ambrosia artemisiifolia</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4.</td><td><u>Rumex crispus</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">70</td> <td style="text-align: right;">=Total Cover</td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Woody Vine Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>      </u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Remarks: (Include photo numbers here or on a separate sheet.) The dominance test and prevalence index are met. The vegetation is mowed The vegetation is hydrophytic at DP-UPL-WSJ-002-1.																																																																																																																																																																							



## SOIL

Sampling Point: DP-UPL-WSJ-002-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR 3/1	100					Loamy/Clayey	clay loam
14-18	10YR 4/1	98	10YR 3/6	2	C	PL	Loamy/Clayey	clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks:  
No hydric soil indicators are met. The soil is not hydric at DP-UPL-WSJ-002-1.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?    Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?    Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One primary (oxidized rhizospheres on living roots) and one secondary (geomorphic position) indicator of wetland hydrology are observed. There is wetland hydrology at DP-UPL-WSJ-002-1.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/13/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-002-2</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		Section, Township, Range: <u>13 9N 2E</u>
Landform (hillside, terrace, etc.): <u>terrace</u>		Local relief (concave, convex, none): <u>none</u>
Slope (%): <u>0-2</u>	Lat: <u>39.8853124°</u>	Long: <u>-84.6147566°</u>
Soil Map Unit Name: <u>Sloan silt loam</u>		Datum: <u>NAD 83 OH.S</u>
Soil NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  Y  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>  X  </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>  X  </u>
Remarks: All three parameters required for a wetland are not Present at DP-UPL-WSJ-002-2. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is part of a Utility Corridor; Vegetation is mowed and Managed.	

**VEGETATION – Use scientific names of plants.**

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Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation indicators are met. The vegetation is not hydrophytic at DP-UPL-WSJ-002-2.																																																																																																																																																																							



## SOIL

Sampling Point: DP-UPL-WSJ-002-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-9	10YR 4/1	100					Loamy/Clayey	
9-18	10YR 4/1	80	7.5YR 3/4	20	C	PL	Loamy/Clayey	clay loam
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.					<sup>2</sup> Location: PL=Pore Lining, M=Matrix.			
<b>Hydric Soil Indicators:</b>						<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Coast Prairie Redox (A16)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> Iron-Manganese Masses (F12)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (F21)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Dark Surface (S7)			<input type="checkbox"/> Very Shallow Dark Surface (F22)		
<input type="checkbox"/> Stratified Layers (A5)			<input type="checkbox"/> Loamy Mucky Mineral (F1)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> 2 cm Muck (A10)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input checked="" type="checkbox"/> Depleted Matrix (F3)					
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			<input type="checkbox"/> Redox Depressions (F8)					
<b>Restrictive Layer (if observed):</b>						<b>Hydric Soil Present?</b>		
Type: _____						Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Depth (inches): _____								
Remarks: Hydric soil indicator depleted matrix F3 is met. Soil is hydric at DP-UPL-WSJ-002-2.								

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: One primary (oxidized rhizospheres on living roots) indicator of wetland hydrology are observed. There is wetland hydrology at DP-UPL-WSJ-002-2.			



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/13/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-002-3</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>	Section, Township, Range: <u>13 9N 2E</u>	
Landform (hillside, terrace, etc.): <u>Terrace</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>0-2</u>	Lat: <u>39.8856549°</u>	Long: <u>-84.6147013°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Sloan silt loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  Y  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>  X  </u> Hydric Soil Present?    Yes <u>      </u> No <u>  X  </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>  X  </u>
Remarks: All three parameters required for a wetland are not Present at DP-UPL-WSJ-002-2. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is part of a Utility Corridor; Vegetation is mowed and Managed.	

**VEGETATION – Use scientific names of plants.**

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Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation indicators are met. The vegetation is not hydrophytic at DP-UPL-WSJ-002-3.																																																																																																																																																																							



## SOIL

Sampling Point: DP-UPL-WSJ-002-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 3/1	100					Loamy/Clayey	
6-12	10YR 4/3	60	10YR 5/4	40	RM	M	Loamy/Clayey	
12-18	10YR 5/6	70	10YR 6/4	30	D	M	Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks:  
No hydric soil indicators are met. Soil is not hydric at DP-UPL-WSJ-002-3.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One primary (presence of reduced iron) indicator of wetland hydrology are observed. There is wetland hydrology at DP-UPL-WSJ-002-3.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/14/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-003</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		Section, Township, Range: <u>31 9N 2E</u>
Landform (hillside, terrace, etc.): <u>Toe of slope</u>		Local relief (concave, convex, none): <u>concave</u>
Slope (%): <u>2-6</u>	Lat: <u>39.8345204°</u>	Long: <u>-84.6972010°</u>
Soil Map Unit Name: <u>Miamian-Celina silt loams &amp; Kokomo Silt Loam</u>		Datum: <u>NAD 83 OH.S</u>
Soil NWI classification: <u>N/A</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>X</u> No <u>      </u> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>X</u>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>X</u> No <u>      </u> Hydric Soil Present?    Yes <u>X</u> No <u>      </u> Wetland Hydrology Present?    Yes <u>X</u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No <u>      </u>
Remarks: All Three wetland parameters are present at DP-WSJ-003; this area consists of a wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Adjacent toe-of-slope to highway overpass.	

**VEGETATION – Use scientific names of plants.**

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Remarks: (Include photo numbers here or on a separate sheet.) The dominance test and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-003.																																																																																																																																																																							



## SOIL

Sampling Point: DP-WSJ-003

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR 4/1	95	10YR 3/6	5	C	PL	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator F3 depleted matrix is met. The soil is hydric at DP-WSJ-003.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0 (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Two primary (saturation and inundation on Aerials) and two secondary (geomorphic position and crayfish burrows) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-003. Saturated to Surface.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/14/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-003</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		Section, Township, Range: <u>31 9N 2E</u>
Landform (hillside, terrace, etc.): <u>terrace</u>		Local relief (concave, convex, none): <u>none</u>
Slope (%): <u>2-6</u>	Lat: <u>39.8345321°</u>	Long: <u>-84.6972418°</u>
Soil Map Unit Name: <u>Miamian-Celina silt loams</u>		Datum: <u>NAD 83 OH.S</u>
Soil NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>X</u> No <u>      </u> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>X</u>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>X</u> Hydric Soil Present?    Yes <u>      </u> No <u>X</u> Wetland Hydrology Present?    Yes <u>      </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>X</u>
Remarks: Wetland parameters are not Present at DP-UPL-WSJ-003. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is near a road over-pass for I-70.	

**VEGETATION – Use scientific names of plants.**

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2.	<u>Bromus inermis</u>	25	Yes	FACU																																																																																																																																																			
3.	<u>Solidago canadensis</u>	20	Yes	FACU																																																																																																																																																			
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Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation indicators are met. The vegetation is not hydrophytic at DP-UPL-WSJ-003.																																																																																																																																																							



## SOIL

Sampling Point: DP-UPL-WSJ-003

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 4/1	100					Loamy/Clayey	
12-18	10YR 3/1	100					Loamy/Clayey	Blocky

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks:  
No soil hydric indicators are met. The soil is not hydric at DP-UPL-WSJ-003.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No primary or secondary indicators of wetland hydrology are observed. There is no wetland hydrology at DP-UPL-WSJ-003.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/14/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-004-1</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		Section, Township, Range: <u>31 9N 2E</u>
Landform (hillside, terrace, etc.): <u>toe slope</u>		Local relief (concave, convex, none): <u>convex</u>
Slope (%): <u>0-1</u>	Lat: <u>39.8351008°</u>	Long: <u>-84.6986067°</u>
Datum: <u>NAD 83 OH.S</u>		
Soil Map Unit Name: <u>Kokomo silty clay loam</u>		NWI classification: <u>NA</u>
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All Three wetland parameters are present at DP-WSJ-004-1; this area consists of a Scrub/Shrub wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Part of I-70 Drainage, man induced wetland.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>  30  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Fraxinus pennsylvanica</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Juniperus virginiana</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">25</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>  15  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Fraxinus pennsylvanica</u></td><td></td><td style="text-align: center;">25</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Salix nigra</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">40</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>  5  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Symphytotrichum lanceolatum</u></td><td></td><td style="text-align: center;">60</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. <u>Typha latifolia</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>3. <u>Leersia oryzoides</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>4. <u>Scirpus atrovirens</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>5. <u>Asclepias incarnata</u></td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>6. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">107</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>  30  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Vitis riparia</u></td><td></td><td style="text-align: center;">25</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">25</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table>	Tree Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	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Remarks: (Include photo numbers here or on a separate sheet.) The dominance test is met. The vegetation is hydrophytic at DP-WSJ-004-1.																																																																																																																																																							



# SOIL

Sampling Point: DP-WSJ-004-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR 4/1	90	10YR 3/6	10	C	PL	Loamy/Clayey	Prominent redox concentrations
7-18	2.5YR 5/2	80	10YR 3/2	20	C	PL	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator F3 depleted matrix is met. The soil is hydric at DP-WSJ-004-1.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches):    0 (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Two primary (saturation and oxidized rhizospheres on living roots) and three secondary (drainage patterns, Geomorphic Position, and the FAC-Neutral Test) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WS-004-1. Linear Depression. Saturated to Surface



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/14/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-004-2</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		
Section, Township, Range: <u>31 9N 2E</u>		
Landform (hillside, terrace, etc.): <u>Terrace</u>		
Local relief (concave, convex, none): <u>concave</u>		
Slope (%): <u>0-2</u> Lat: <u>39.8351242°</u> Long: <u>-84.6995313°</u> Datum: <u>NAD 83 OH.S</u>		
Soil Map Unit Name: <u>Celina silt loam</u> NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed? Are "Normal Circumstances" present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic? (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: All Three wetland parameters are present at DP-WSJ-004-2; this area consists of a Scrub/Shrub wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Part of I-70 Drainage.	

**VEGETATION – Use scientific names of plants.**

<table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Fraxinus pennsylvanica</u></td><td style="text-align: center;">35</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2.</td><td><u>Cornus amomum</u></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">50 =Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Leersia oryzoides</u></td><td style="text-align: center;">45</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2.</td><td><u>Scirpus atrovirens</u></td><td style="text-align: center;">25</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>3.</td><td><u>Scirpus pendulus</u></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>4.</td><td><u>Carex vulpinoidea</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>5.</td><td><u>Lycopus americanus</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">100 =Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Toxicodendron radicans</u></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">15 =Total Cover</td> <td></td> <td></td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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# SOIL

Sampling Point: DP-WSJ-004-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR 4/1	90	10YR 3/6	10	C	PL	Loamy/Clayey	Prominent redox concentrations
7-18	2.5YR 5/2	80	10YR 3/2	20	C	PL	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator F3 depleted matrix is met. The soil is hydric at DP-WSJ-004-2.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Three primary (Saturation, oxidized rhizospheres on living roots, inundation) and two secondary (the FAC-neutral test and Geomorphic Position) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-004-2. Linear Depression. Saturated to Surface.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/14/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-UPL-004-1</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		Section, Township, Range: <u>31 9N 2E</u>
Landform (hillside, terrace, etc.): <u>Hillside</u>		Local relief (concave, convex, none): <u>concave</u>
Slope (%): <u>0-2</u>	Lat: <u>39.8351331°</u>	Long: <u>-84.6985835°</u>
Soil Map Unit Name: <u>Celina silt loam</u>		Datum: <u>NAD 83 OH.S</u>
Soil NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  Y  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?    Yes <u>      </u> No <u>  X  </u> Wetland Hydrology Present?    Yes <u>      </u> No <u>  X  </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>  X  </u>
Remarks: Wetland parameters are not Present at DP-UPL-WSJ-004-1. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is part of the drainage system for I-70.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>  30  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Juniperus virginiana</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2. <u>Fraxinus pennsylvanica</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">30</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>  15  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Aesculus glabra</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">20</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>  5  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Vitis riparia</u></td><td></td><td style="text-align: center;">70</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Festuca pratensis</u></td><td></td><td style="text-align: center;">25</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>3. <u>Taraxacum officinale</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4. <u>Leucanthemum vulgare</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>5. <u>Cichorium intybus</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>6. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">140</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>      </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table>	Tree Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	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Remarks: (Include photo numbers here or on a separate sheet.) The dominance test is met. The vegetation is hydrophytic at DP-WSJ-UPL-004-1.																																																																																																																																																							



# SOIL

Sampling Point: DP-WSJ-UPL-004-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 5/4	100					Loamy/Clayey	clay loam
10-18	10YR 5/3	70	10YR 3/6	30	RM	M	Loamy/Clayey	clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks:  
No hydric soil indicators are met. Soils are very gravelly, rocky and had disturbed soils. The soil is not hydric at DP-WSJ-UPL-004-1.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No hydric soil indicators are met. The soil is not hydric at DP-WSJ-UPL-004-1.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/14/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-004-2</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>	Section, Township, Range: <u>31 9N 2E</u>	
Landform (hillside, terrace, etc.): <u>hilltop</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>0-2</u>	Lat: <u>39.8351636°</u>	Long: <u>-84.6996033°</u>
Soil Map Unit Name: <u>Celina silt loam</u>		Datum: <u>NAD 83 OH.S</u>
Soil NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  Y  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>  X  </u> Hydric Soil Present?    Yes <u>      </u> No <u>  X  </u> Wetland Hydrology Present?    Yes <u>      </u> No <u>  X  </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>  X  </u>
Remarks: Wetland parameters are not Present at DP-UPL-WSJ-004-2. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is part of the drainage system for I-70.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td colspan="2"></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Fraxinus pennsylvanica</u></td><td></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Elaeagnus umbellata</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>3. <u>Juniperus virginiana</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>4. <u>Acer saccharinum</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>5. <u>Liriodendron tulipifera</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">80 =Total Cover</td> <td colspan="2"></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Leersia oryzoides</u></td><td></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2. <u>Solidago canadensis</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>3. <u>Scirpus pendulus</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>4. <u>Carex vulpinoidea</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>5. <u>Asclepias verticillata</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>6. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">90 =Total Cover</td> <td colspan="2"></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Toxicodendron radicans</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">10 =Total Cover</td> <td colspan="2"></td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Indicator Status	1. <u>Toxicodendron radicans</u>		10	Yes	FAC	2. _____							10 =Total Cover			<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>      3      </u> (A)  Total Number of Dominant Species Across All Strata: <u>      6      </u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>      50.0%      </u> (A/B)
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	<b>Hydrophytic Vegetation Indicators:</b> <u>      </u> 1 - Rapid Test for Hydrophytic Vegetation <u>      </u> 2 - Dominance Test is >50% <u>      </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																																																																																																																																						
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Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation indicators are met. The vegetation is not hydrophytic at DP-UPL-WSJ-004-2.																																																																																																																																																							



## SOIL

Sampling Point: DP-UPL-WSJ-004-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR 3/1	100					Loamy/Clayey	Rocky/gravel

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
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<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: <u>Large roots</u> Depth (inches): <u>7</u>	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
No hydric soil indicators are met. A restrictive layer of large roots at 7 inches is observed. The soil is not hydric at DP-UPL-WSJ-004.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
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<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>      </u> Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>      </u> Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>      </u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No primary or secondary indicators of wetland hydrology are met. There is wetland hydrology at DP-UPL-WSJ-004-2.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/14/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-005</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>	Section, Township, Range: <u>36 9N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>0-1</u>	Lat: <u>39.8351228°</u>	Long: <u>-84.7050242°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Kokomo silty clay loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  Y  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All Three wetland parameters are present at DP-WSJ-005; this area consists of a wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Located in agricultural field, contained large boulders for erosion control.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>  30  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>  15  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Fraxinus pennsylvanica</u></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">15 =Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>  5  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Typha latifolia</u></td><td style="text-align: center;">90</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2.</td><td><u>Scirpus atrovirens</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">100 =Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>  30  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Toxicodendron radicans</u></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">15 =Total Cover</td> </tr> </table>	Tree Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1.					2.					3.					4.					5.							=Total Cover			Sapling/Shrub Stratum	(Plot size: <u>  15  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1.	<u>Fraxinus pennsylvanica</u>	15	Yes	FACW	2.					3.					4.					5.							15 =Total Cover			Herb Stratum	(Plot size: <u>  5  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1.	<u>Typha latifolia</u>	90	Yes	OBL	2.	<u>Scirpus atrovirens</u>	10	No	OBL	3.					4.					5.					6.					7.					8.					9.					10.							100 =Total Cover			Woody Vine Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	Indicator Status	1.	<u>Toxicodendron radicans</u>	15	Yes	FAC	2.							15 =Total Cover			<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>      3      </u> (A)  Total Number of Dominant Species Across All Strata: <u>      3      </u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>  100.0%  </u> (A/B)
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<b>Hydrophytic Vegetation Indicators:</b> <u>      </u> 1 - Rapid Test for Hydrophytic Vegetation <u>  X  </u> 2 - Dominance Test is >50% <u>  X  </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																																																																																																																																							
<b>Hydrophytic Vegetation Present?</b> Yes <u>  X  </u> No <u>      </u>																																																																																																																																																							
Remarks: (Include photo numbers here or on a separate sheet.) The dominance test, and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-005.																																																																																																																																																							



# SOIL

Sampling Point: DP-WSJ-005

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 4/1	80	10YR 3/6	20	C	M	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) <input type="checkbox"/> Redox Depressions (F8)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)  <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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<b>Restrictive Layer (if observed):</b> Type: _____ rocks/boulders Depth (inches): _____ 10	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator F3 depleted matrix is met. Refusal from rock and boulders is met at 10 inches. The soil is hydric at DP-WSJ-005.

# HYDROLOGY

<b>Wetland Hydrology Indicators:</b>			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches):      0 (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Three primary (Saturation, oxidized rhizospheres on living roots, inundation) and two secondary (crayfish burrows and the FAC-neutral test) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-005. Area has erosion control BMPs in place to curtail erosion from field surface flow runoff. Saturated to Surface.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/14/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-005</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>	Section, Township, Range: <u>36 9N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>0-2</u>	Lat: <u>39.8350639°</u>	Long: <u>-84.7050395°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Kokomo silty clay loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>X</u> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>X</u> No <u>      </u>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>X</u> Hydric Soil Present?    Yes <u>      </u> No <u>X</u> Wetland Hydrology Present?    Yes <u>      </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>X</u>
Remarks: Wetland parameters are not Present at DP-UPL-WSJ-005. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is within an active agricultural field.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>N/A</u></td><td></td><td></td><td></td><td></td></tr> <tr><td>2. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr><td>3. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr><td>4. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr><td>5. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>N/A</u></td><td></td><td></td><td></td><td></td></tr> <tr><td>2. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr><td>3. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr><td>4. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr><td>5. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Zea mays</u></td><td></td><td style="text-align: center;">50</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>2. <u>Setaria pumila</u></td><td></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>3. <u>Arctium minus</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4. <u>Bromus inermis</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>5. <u>Capsella bursa-pastoris</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>6. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr><td>7. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr><td>8. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr><td>9. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr><td>10. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">110 =Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>N/A</u></td><td></td><td></td><td></td><td></td></tr> <tr><td>2. <u>      </u></td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation indicators are met. The vegetation is not hydrophytic at DP-UPL-WSJ-005.																																																																																																																																																																							



## SOIL

Sampling Point: DP-UPL-WSJ-005

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
(includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
No primary or secondary indicators of wetland hydrology are met. There is not wetland hydrology at DP-UPL-WSJ-005.			



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/15/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-006-1</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		
Section, Township, Range: <u>36 9N 1E</u>		
Landform (hillside, terrace, etc.): <u>Terrace</u>		
Local relief (concave, convex, none): <u>concave</u>		
Slope (%): <u>0-2</u> Lat: <u>39.8328622°</u> Long: <u>-84.7185191°</u> Datum: <u>NAD 83 OH.S</u>		
Soil Map Unit Name: <u>Sloan Sandy Substratum; 0-2% slopes; Frequently Flooded</u> NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed? Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic? (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: All three wetland parameters are present at DP-WSJ-006-1; this area consists of a PEM portion to a wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection.	

**VEGETATION – Use scientific names of plants.**

<table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u><i>Fraxinus pennsylvanica</i></u></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2.</td><td><u><i>Cornus amomum</i></u></td><td style="text-align: center;">10</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">40 =Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u><i>Solidago canadensis</i></u></td><td style="text-align: center;">35</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2.</td><td><u><i>Equisetum hyemale</i></u></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3.</td><td><u><i>Carex shortiana</i></u></td><td style="text-align: center;">25</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>4.</td><td><u><i>Carex grayi</i></u></td><td style="text-align: center;">20</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>5.</td><td><u><i>Carex blanda</i></u></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>6.</td><td><u><i>Apocynum cannabinum</i></u></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>7.</td><td><u><i>Carex annectens</i></u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>8.</td><td><u><i>Phalaris arundinacea</i></u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>9.</td><td><u><i>Agrostis gigantea</i></u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">155 =Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u><i>Toxicodendron radicans</i></u></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">15 =Total Cover</td> <td></td> <td></td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Indicator Status	1.	<u><i>Toxicodendron radicans</i></u>	15	Yes	FAC	2.							15 =Total Cover			<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>83.3%</u> (A/B)
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	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> <u>2</u> - Dominance Test is >50% <u>X</u> <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>  </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																																																																																																																																						
	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																																																																																																																																						
Remarks: (Include photo numbers here or on a separate sheet.) The dominance test, and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-006-1.																																																																																																																																																							



# SOIL

Sampling Point: DP-WSJ-006-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 3/1	100					Loamy/Clayey	
4-16	7.5YR 4/1	90	7.5YR 3/4	10	C	PL	Loamy/Clayey	Distinct redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicators depleted below dark surface A11 and depleted matrix F3 are met. The soil was hydric at DP-WSJ-006-1.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input checked="" type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 10 (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Two primary (saturation and oxidized rhizospheres on living roots) and two secondary (FAC-neutral test & Geomorphic Position) indicators of wetland hydrology are observed. Datapoint is located in a floodplain. There is wetland hydrology at DP-WSJ-006-1.



OMB Control #: 0710-0024, Exp:11/30/2024  
Requirement Control Symbol EXEMPT:  
(Authority: AR 335-15, paragraph 5-2a)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

All three wetland parameters are present at DP-WSJ-006-2; therefore, this area consists of a PFO wetland. According to local three-month antecedent precipitation calculations, hydrologic and climatologic conditions were drier than normal at the time of data collection.

The dominance test, and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-006-2.



# SOIL

Sampling Point: DP-WSJ-006-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-7	10YR 4/1	100					Loamy/Clayey	
7-16	10YR 4/1	90	7.5YR 3/4	10	C	PL	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator depleted matrix F3 is met. The soil is hydric at DP-WSJ-006-2.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input checked="" type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches):    13 (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One primary (saturation, oxidized rhizospheres on living roots, and floodplain location) and one secondary (geomorphic position) indicator of wetland hydrology are observed. Datapoint is located in a floodplain. There is wetland hydrology at DP-WSJ-006-2.



OMB Control #: 0710-0024, Exp:11/30/2024  
Requirement Control Symbol EXEMPT:  
(Authority: AR 335-15, paragraph 5-2a)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?                    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?        Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All Three wetland parameters are present at DP-WSJ-006-1; this area consists of a PFO portion to a wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection.	

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Betula nigra</i>	40	Yes	FACW
2.	<i>Acer negundo</i>	30	Yes	FAC
3.				
4.				
5.				
		70	=Total Cover	
Sapling/Shrub Stratum				
(Plot size: 15 )				
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Herb Stratum				
(Plot size: 5 )				
1.	<i>Solidago canadensis</i>	100	Yes	FACW
2.	<i>Pilea pumila</i>	10	No	FACW
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		110	=Total Cover	
Woody Vine Stratum				
(Plot size: 30 )				
1.	<i>Toxicodendron radicans</i>	15	Yes	FAC
2.				
		15	=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 150	x 2 = 300
FAC species 45	x 3 = 135
FACU species 0	x 4 = 0
UPL species 0	x 5 = 0
Column Totals: 195 (A)	435 (B)
Prevalence Index = B/A = 2.23	

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is  $\leq 3.0^1$

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

The dominance test is met. The vegetation is hydrophytic at DP-WSJ-006-3.



# SOIL

Sampling Point: DP-WSJ-006-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 3/1	100					Loamy/Clayey	
3-16	10Y 4/1	90	7.5YR 3/4	10	C	PL	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Two hydric soil indicators depleted below dark surface A11, loamy gleyed matrix F2. The soil is hydric at DP-WSJ-006-3.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input checked="" type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Three primary indicators (saturation, inundation, oxidized rhizospheres on living roots) and two secondary (geomorphic position and FAC-Neutral Test) indicator of wetland hydrology are observed. Datapoint is located in a floodplain. There is wetland hydrology at DP-WSJ-006-3.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/15/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-006-1</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		Section, Township, Range: <u>36 9N 1E</u>
Landform (hillside, terrace, etc.): <u>Terrace</u>		Local relief (concave, convex, none): <u>none</u>
Slope (%): <u>2-6</u>	Lat: <u>39.8329642°</u>	Long: <u>-84.7184733°</u>
Soil Map Unit Name: <u>Celina silt loam</u>		Datum: <u>NAD 83 OH.S</u>
Soil NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>X</u> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>X</u> No <u>      </u>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>X</u> Hydric Soil Present?    Yes <u>      </u> No <u>X</u> Wetland Hydrology Present?    Yes <u>      </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>X</u>
Remarks: Wetland parameters are not Present at DP-UPL-WSJ-006-1. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is within an agricultural Field; Farmed.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">=Total Cover</td> <td colspan="2"></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>15</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Populus deltoides</u></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">2</td> <td style="text-align: center;">=Total Cover</td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>5</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Glycine max</u></td><td style="text-align: center;">50</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>2.</td><td><u>Ambrosia artemisiifolia</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>3.</td><td><u>Ambrosia trifida</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>4.</td><td><u>Taraxacum officinale</u></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">62</td> <td style="text-align: center;">=Total Cover</td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">=Total Cover</td> <td colspan="2"></td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Indicator Status	1.					2.							=Total Cover			<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Dominance Test worksheet:</b>           Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)           Total Number of Dominant Species Across All Strata: <u>1</u> (B)           Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)       </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Prevalence Index worksheet:</b>   <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>7</u></td> <td>x 3 = <u>21</u></td> </tr> <tr> <td>FACU species <u>7</u></td> <td>x 4 = <u>28</u></td> </tr> <tr> <td>UPL species <u>50</u></td> <td>x 5 = <u>250</u></td> </tr> <tr> <td>Column Totals: <u>64</u> (A)</td> <td><u>299</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.67</u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Hydrophytic Vegetation Indicators:</b>  <u>      </u> 1 - Rapid Test for Hydrophytic Vegetation  <u>      </u> 2 - Dominance Test is &gt;50%  <u>      </u> 3 - Prevalence Index is ≤3.0<sup>1</sup>  <u>      </u> 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.       </div> <div style="border: 1px solid black; padding: 5px;"> <b>Hydrophytic Vegetation Present?</b>    Yes <u>      </u>    No <u>X</u> </div>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>7</u>	x 3 = <u>21</u>	FACU species <u>7</u>	x 4 = <u>28</u>	UPL species <u>50</u>	x 5 = <u>250</u>	Column Totals: <u>64</u> (A)	<u>299</u> (B)	Prevalence Index = B/A = <u>4.67</u>	
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Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation indicators are met. The vegetation is not hydrophytic at DP-UPL-WSJ-006-1.																																																																																																																																																																							



# SOIL

Sampling Point: DP-UPL-WSJ-006-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 4/2	100					Loamy/Clayey	Clay loam
8-16	10YR 5/4	80	10YR 5/1	20	D	M	Loamy/Clayey	Silty clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
---	---

Remarks:  
No hydric soil indicators are met. The soil is not hydric at DP-UPL-WSJ-006-1.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No primary or secondary indicators of wetland hydrology are met. There is not wetland hydrology at DP-UPL-WSJ-006-1.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/15/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-006-2</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		
Section, Township, Range: <u>36 9N 1E</u>		
Landform (hillside, terrace, etc.): <u>Terrace</u>		
Local relief (concave, convex, none): <u>none</u>		
Slope (%): <u>0-2</u>	Lat: <u>39.8331427°</u>	Long: <u>-84.7195397°</u>
Datum: <u>NAD 83 OH.S</u>		
Soil Map Unit Name: <u>Sloan silt loam, sandy substratum</u>		
NW1 classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>      </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>  X  </u> Hydric Soil Present?    Yes <u>      </u> No <u>  X  </u> Wetland Hydrology Present?    Yes <u>      </u> No <u>  X  </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>  X  </u>
Remarks: All three wetland parameters are absent at DP-UPL-WSJ-006-2; this is an upland area adjacent to a agricultural field. According to local three-month antecedent precipitation calculations, hydrologic and climatologic conditions were drier than normal at the time of data collection.	

**VEGETATION – Use scientific names of plants.**

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Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation indicators are met. The vegetation is not hydrophytic at DP-UPL-WSJ-006-2.																																																																																																																																																							



**VEGETATION Continued** – Use scientific names of plants.

 Sampling Point: DP-UPL-WSJ-006-2

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody Vine</b> – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
<u>60</u> =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
<u>30</u> =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
<u>52</u> =Total Cover				
<u>Woody Vine Stratum</u>				
3. <i>Toxicodendron radicans</i>	10	No	FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>100</u> =Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)



# SOIL

Sampling Point: DP-UPL-WSJ-006-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 3/1	100					Sandy	Sandy silt
12-16	10YR 3/1	100					Loamy/Clayey	Silty clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
No hydric indicators are met. The soil is not hydric at DP-UPL-WSJ-006-2.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One secondary indicator (geomorphic position) of wetland hydrology is met. There is not wetland hydrology at DP-UPL-WSJ-006-2.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/15/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-007</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>	Section, Township, Range: <u>36 9N 1E</u>	
Landform (hillside, terrace, etc.): <u>hillside</u>	Local relief (concave, convex, none): <u>convex</u>	
Slope (%): <u>0-2</u>	Lat: <u>39.8329623°</u>	Long: <u>-84.7201856°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Sloan silt loam, sandy substratum</u>		NWI classification: <u>NA</u>
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>      </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All three wetland parameters are present at DP-WSJ-007; therefore, this area consists of a PFO wetland. According to local three-month antecedent precipitation calculations, hydrologic and climatologic conditions were normal at the time of data collection.	

**VEGETATION – Use scientific names of plants.**

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Remarks: (Include photo numbers here or on a separate sheet.) The dominance test, and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-007.																																																																																																																																																							



# SOIL

Sampling Point: DP-WSJ-007

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 3/1	100					Loamy/Clayey	
4-16	7.5YR 4/1	90	7.5YR 3/4	10	C	PL	Loamy/Clayey	Distinct redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) <input type="checkbox"/> Redox Depressions (F8)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)  <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator A11 depleted below dark surface F3 depleted matrix is met. The soil is hydric at DP-WSJ-007.

# HYDROLOGY

<b>Wetland Hydrology Indicators:</b>			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input checked="" type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>14</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Two primary (saturation and oxidized rhizospheres on living roots) indicators and two secondary (FAC-neutral test & Geomorphic Position) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-007. Abutting to a stream, within a 100-yr Floodplain.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/15/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-007</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>		Section, Township, Range: <u>36 9N 1E</u>
Landform (hillside, terrace, etc.): <u>terrace</u>		Local relief (concave, convex, none): <u>none</u>
Slope (%): <u>0-2</u>	Lat: <u>39.8329760°</u>	Long: <u>-84.7205154°</u>
Soil Map Unit Name: <u>Sloan silt loam, sandy substratum</u>		Datum: <u>NAD 83 OH.S</u>
Soil NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>      </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>  X  </u> Hydric Soil Present?                    Yes <u>      </u> No <u>  X  </u> Wetland Hydrology Present?        Yes <u>      </u> No <u>  X  </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>  X  </u>
Remarks: All three wetland parameters are absent at DP-UPL-WSJ-007; is in an upland area. According to local three-month antecedent precipitation calculations, hydrologic and climatologic conditions were drier than normal at the time of data collection.	

**VEGETATION – Use scientific names of plants.**

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**VEGETATION Continued** – Use scientific names of plants.

 Sampling Point: DP-UPL-WSJ-007

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/Shrub</b> – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody Vine</b> – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
100 =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
30 =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
15 =Total Cover				
<u>Woody Vine Stratum</u>				
3. <i>Toxicodendron radicans</i>	5	No	FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
100 =Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)



## SOIL

Sampling Point: DP-UPL-WSJ-007

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
(includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
No primary or secondary indicators of wetland hydrology are met. There is not wetland hydrology at DP-UPL-WSJ-007.			



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/16/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-008</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>	Section, Township, Range: <u>02 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>2-6</u> Lat: <u>39.8167715°</u>	Long: <u>-84.7399684°</u>	Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Celina silt loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>      </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<table style="width:100%;"> <tr> <td style="width:60%;"><b>Is the Sampled Area within a Wetland?</b></td> <td style="width:40%;">Yes <u>  X  </u>    No <u>      </u></td> </tr> </table>	<b>Is the Sampled Area within a Wetland?</b>	Yes <u>  X  </u> No <u>      </u>
<b>Is the Sampled Area within a Wetland?</b>	Yes <u>  X  </u> No <u>      </u>		
Remarks: All three wetland parameters are present at DP-WSJ-008; therefore, this area consists of a wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Stormwater input into this wetland. Wood fill in wetland.			

**VEGETATION – Use scientific names of plants.**

<table style="width:100%;"> <tr> <td style="width:35%;"> <b>Tree Stratum</b>    (Plot size: <u>  30  </u> )             </td> <td style="width:10%; text-align: center;">Absolute % Cover</td> <td style="width:10%; text-align: center;">Dominant Species?</td> <td style="width:10%; text-align: center;">Indicator Status</td> </tr> <tr><td>1. <u>Acer saccharinum</u></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Celtis occidentalis</u></td><td style="text-align: center;">25</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>3. <u>Populus deltoides</u></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">75</td><td colspan="2">=Total Cover</td></tr> </table> <table style="width:100%;"> <tr> <td style="width:35%;"> <b>Sapling/Shrub Stratum</b>    (Plot size: <u>  15  </u> )             </td> <td style="width:10%; text-align: center;">Absolute % Cover</td> <td style="width:10%; text-align: center;">Dominant Species?</td> <td style="width:10%; text-align: center;">Indicator Status</td> </tr> <tr><td>1. <u>Lindera benzoin</u></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Fraxinus pennsylvanica</u></td><td style="text-align: center;">10</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. _____</td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">25</td><td colspan="2">=Total Cover</td></tr> </table> <table style="width:100%;"> <tr> <td style="width:35%;"> <b>Herb Stratum</b>    (Plot size: <u>  5  </u> )             </td> <td style="width:10%; text-align: center;">Absolute % Cover</td> <td style="width:10%; text-align: center;">Dominant Species?</td> <td style="width:10%; text-align: center;">Indicator Status</td> </tr> <tr><td>1. <u>Solidago canadensis</u></td><td style="text-align: center;">35</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Pilea pumila</u></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. <u>Pilea pumila</u></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>4. <u>Impatiens capensis</u></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>5. <u>Carex vulpinoidea</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>6. <u>Juncus tenuis</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>7. _____</td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">110</td><td colspan="2">=Total Cover</td></tr> </table> <table style="width:100%;"> <tr> <td style="width:35%;"> <b>Woody Vine Stratum</b>    (Plot size: <u>  30  </u> )             </td> <td style="width:10%; text-align: center;">Absolute % Cover</td> <td style="width:10%; text-align: center;">Dominant Species?</td> <td style="width:10%; text-align: center;">Indicator Status</td> </tr> <tr><td>1. <u>Toxicodendron radicans</u></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td></tr> <tr><td colspan="2" style="text-align: right;">15</td><td colspan="2">=Total Cover</td></tr> </table>	<b>Tree Stratum</b> (Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	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<b>Hydrophytic Vegetation Present?</b>	Yes <u>  X  </u> No <u>      </u>																																																																																																																																																																		
Remarks: (Include photo numbers here or on a separate sheet.) The dominance test, and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-008.																																																																																																																																																																			



## SOIL

Sampling Point: DP-WSJ-008

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
(includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
Two primary (water-stained leaves and oxidized rhizospheres on living roots) and two secondary (drainage patterns and FAC-neutral test) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-008.			



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/16/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-008</u>
Investigator(s): <u>Stuart Jennings, Anna Stover</u>	Section, Township, Range: <u>02 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>0-2</u>	Lat: <u>39.8169630°</u>	Long: <u>-84.7380292°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Crosby-Celina silt loams</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>X</u> (If no, explain in Remarks.)		
Are Vegetation <u>Y</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>X</u> No <u>      </u>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>X</u> Hydric Soil Present?    Yes <u>      </u> No <u>X</u> Wetland Hydrology Present?    Yes <u>      </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>X</u>
Remarks: Wetland parameters are not Present at DP-UPL-WSJ-008. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is upland and is Mowed & Managed.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>15</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>5</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Festuca rubra</u></td><td style="text-align: center;">45</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2.</td><td><u>Pilea pumila</u></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>3.</td><td><u>Pilea pumila</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4.</td><td><u>Impatiens capensis</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>5.</td><td><u>Carex vulpinoidea</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">100</td> <td colspan="2" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Indicator Status	1.					2.							=Total Cover			<div style="border-bottom: 1px solid black; padding-bottom: 5px;"> <b>Dominance Test worksheet:</b>           Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)           Total Number of Dominant Species Across All Strata: <u>2</u> (B)           Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)       </div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;"> <b>Prevalence Index worksheet:</b>  <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>90</u></td> <td>x 4 = <u>360</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>390</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.90</u></td> </tr> </table> </div> <div style="border-bottom: 1px solid black; padding-bottom: 5px;"> <b>Hydrophytic Vegetation Indicators:</b>  <u>      </u> 1 - Rapid Test for Hydrophytic Vegetation  <u>      </u> 2 - Dominance Test is &gt;50%  <u>      </u> 3 - Prevalence Index is ≤3.0<sup>1</sup>  <u>      </u> 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.       </div> <div style="padding: 5px;"> <b>Hydrophytic Vegetation Present?</b>    Yes <u>      </u>    No <u>X</u> </div>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>90</u>	x 4 = <u>360</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>390</u> (B)	Prevalence Index = B/A = <u>3.90</u>	
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Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation is not present at DP-UPL-WSJ-008.																																																																																																																																																																							



## SOIL

Sampling Point: DP-UPL-WSJ-008

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 4/2						Loamy/Clayey	silt loam
8-11	10YR 5/2						Loamy/Clayey	silt loam
11-16	10YR 5/3						Loamy/Clayey	silt loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks:  
No hydric soil indicators are met. The soil is not hydric at DP-UPL-WSJ-008.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
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<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No indicators of wetland hydrology are observed. There is no wetland hydrology at DP-UPL-WSJ-008.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/28/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-009</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>35 9N 2E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>2-6</u>	Lat: <u>39.8349565°</u>	Long: <u>-84.6264493°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Celina silt loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  x  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>      </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All three wetland parameters are present at DP-WSJ-009; therefore, this area consists of a wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Stormwater input into this wetland from I-70.	

**VEGETATION – Use scientific names of plants.**

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Remarks: (Include photo numbers here or on a separate sheet.) The dominance test, and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-009.																																																																																																																																																																							



# SOIL

Sampling Point: DP-WSJ-009

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 2/1						Muck	Black Organic Muck
8-16	10Y 4/1						Muck	Gley soil

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator A4 hydrogen sulfide and A10 2cm muck are met. The soil is hydric at DP-WSJ-009.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0 (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Three primary (saturation, hydrogen sulfide odor, presence of reduced iron, and the presence of reduced iron) indicators and two secondary (FAC-neutral test & Geomorphic position) indicator of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-009. Saturated to Surface; Linear Depression.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/28/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-009</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>35 9N 2E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>2-6</u>	Lat: <u>39.8348547°</u>	Long: <u>-84.6263105°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Celina silt loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>X</u> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>X</u> No <u>      </u>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>X</u> Hydric Soil Present?    Yes <u>      </u> No <u>X</u> Wetland Hydrology Present?    Yes <u>      </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>X</u>
Remarks: No wetland parameters are present at DP-UPL-WSJ-009; therefore, this is an upland area. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is part of the I-70 drainage system.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Prunus serotina</u></td><td></td><td style="text-align: center;">25</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">25</td> <td colspan="2" style="text-align: center;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td></td> <td colspan="2" style="text-align: center;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Festuca rubra</u></td><td></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FAC</td></tr> <tr><td>2. <u>Bromus inermis</u></td><td></td><td style="text-align: center;">25</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>3. <u>Cirsium arvense</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4. <u>Impatiens capensis</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>5. <u>Solidago canadensis</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>6. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">85</td> <td colspan="2" style="text-align: center;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Vitis rupestris</u></td><td></td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">40</td> <td colspan="2" style="text-align: center;">=Total Cover</td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Prunus serotina</u>		25	Yes	FACU	2. _____					3. _____					4. _____					5. _____							25	=Total Cover		Sapling/Shrub Stratum	(Plot size: <u>15</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. _____					2. _____					3. _____					4. _____					5. _____								=Total Cover		Herb Stratum	(Plot size: <u>5</u> )	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Festuca rubra</u>		30	Yes	FAC	2. <u>Bromus inermis</u>		25	Yes	FACU	3. <u>Cirsium arvense</u>		15	No	FACU	4. <u>Impatiens capensis</u>		10	No	FACU	5. <u>Solidago canadensis</u>		5	No	FACU	6. _____					7. _____					8. _____					9. _____					10. _____							85	=Total Cover		Woody Vine Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation indicators are met. The vegetation is not hydrophytic at DP-UPL-WSJ-009.																																																																																																																																																																							



# SOIL

Sampling Point: DP-UPL-WSJ-009

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 3/1	100					Loamy/Clayey	clay loam
6-18	5Y 3/1	100					Loamy/Clayey	clay loam blocky

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks:  
No hydric soil indicators are met. The soil is not hydric at DP-UPL-WSJ-009.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No indicators of wetland hydrology are observed. There is no wetland hydrology at DP-UPL-WSJ-009.



OMB Control #: 0710-0024, Exp:11/30/2024  
Requirement Control Symbol EXEMPT:  
(Authority: AR 335-15, paragraph 5-2a)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b>	Yes <u>X</u>	No <u>      </u>
Hydric Soil Present?	Yes <u>X</u>	No <u>      </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u>      </u>			
<b>Remarks:</b> All three wetland parameters are present at DP-WSJ-010; therefore, this area consists of a wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Stormwater input into this wetland. Cattle impact this Wetland.					

Tree Stratum	(Plot size: 30 )	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Sapling/Shrub Stratum	(Plot size: 15 )			
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Herb Stratum	(Plot size: 5 )			
1. <i>Typha angustifolia</i>		25	Yes	FACW
2. <i>Carex lurida</i>		25	Yes	OBL
3. <i>Carex vulpinoidea</i>		20	Yes	FACW
4. <i>Carex shortiana</i>		20	Yes	FACW
5. <i>Scirpus atrovirens</i>		15	No	OBL
6. <i>Glyceria striata</i>		15	No	OBL
7. <i>Carex cristatella</i>		10	No	FACW
8.				
9.				
10.				
		130	=Total Cover	
Woody Vine Stratum	(Plot size: 30 )			
1.				
2.				
			=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species 55	x 1 = 55
FACW species 75	x 2 = 150
FAC species 0	x 3 = 0
FACU species 0	x 4 = 0
UPL species 0	x 5 = 0
Column Totals: 130 (A)	205 (B)
Prevalence Index = B/A = 1.58	

**Hydrophytic Vegetation Indicators:**

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is  $\leq 3.0^1$

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

The dominance test, and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-010.



# SOIL

Sampling Point: DP-WSJ-010

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 4/1	95	7.5YR 3/4	5	C	M	Loamy/Clayey	
12-16	10YR 4/1	90	7.5YR 3/4	10	C	M	Sandy	sandy silty loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input checked="" type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) <input type="checkbox"/> Redox Depressions (F8)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)  <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator F3 depleted matrix is met. The soil is hydric at DP-WSJ-010.

# HYDROLOGY

<b>Wetland Hydrology Indicators:</b>			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
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<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches):    0 (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Two primary (saturation and oxidized rhizospheres on living roots) indicators and three secondary (drainage patterns, geomorphic position, and FAC-neutral test) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-010. Saturated to Surface.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/29/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-010</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>8 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>6-12</u> Lat: <u>39.8104024°</u>	Long: <u>-84.7980784°</u>	Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Miami loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed? Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic? (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Vegetation amd hydrology wetland parameters are not present but hydric soils are present at DP-UPL-WSJ-010; this is an upland area. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Cattle Present.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Carya cordiformis</u></td><td></td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2. <u>Juniperus virginiana</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">55</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Lonicera maackii</u></td><td></td><td style="text-align: center;">35</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>2. <u>Cornus amomum</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. <u>Tilia americana</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">65</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Festuca rubra</u></td><td></td><td style="text-align: center;">80</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">80</td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td colspan="2" style="text-align: center;">=Total Cover</td></tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Indicator Status	1. _____					2. _____								=Total Cover		<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>16.7%</u> (A/B)
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<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																																																																																																																																																							
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation indicators are met. The vegetation is not hydrophytic at DP-UPL-WSJ-010.																																																																																																																																																							



## SOIL

Sampling Point: DP-UPL-WSJ-010

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12	10YR 3/1	100					Loamy/Clayey	clay loam
12-16	10YR 4/2	80	10YR 4/6	20	RM	M	Loamy/Clayey	clay loam blocky

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
One hydric soil indicator (A11 depleted below dark surface) is met. The soil is hydric at DP-UPL-WSJ-010.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One indicator (geomorphic position) of wetland hydrology are observed. There is no wetland hydrology at DP-UPL-WSJ-010.

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/29/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-011</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>05 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>2-6</u>	Lat: <u>39.8277392°</u>	Long: <u>-84.7844961°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Rainsville silt loam</u>	NW1 classification: <u>R4SBC</u>	

Are climatic / hydrologic conditions on the site typical for this time of year?    Yes ☐    No ☒ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed?    Are "Normal Circumstances" present?    Yes ☒    No ☐

Are Vegetation N, Soil N, or Hydrology N naturally problematic?    (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
 All three wetland parameters are present at DP-WSJ-011; therefore, this area consists of a wetland. According to local three-month antecedent precipitation calculations, hydrologic and climatologic conditions were drier than normal at the time of data collection.

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Typha angustifolia</u></td><td style="text-align: center;">100</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td style="text-align: center;">100</td><td>=Total Cover</td><td></td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td colspan="2"></td><td></td><td>=Total Cover</td><td></td></tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Remarks: (Include photo numbers here or on a separate sheet.)  
 The rapid test, dominance test, and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-011.



# SOIL

Sampling Point: DP-WSJ-011

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	10YR 3/2	100					Loamy/Clayey	
5-16	10YR 4/1	90	7.5YR 3/4	10	C	PL	Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicators A4 hydrogen sulfide, A11 depleted below dark surface, and F3 depleted matrix is met. The soil is hydric at DP-WSJ-011.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 11 Saturation Present?    Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0 (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Four primary (high water table, saturation, hydrogen sulfide odor, and oxidized rhizospheres on living roots) indicators and one secondary (FAC-neutral test) indicator of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-011.

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/29/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-011</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>8 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>6-Feb</u> Lat: <u>39.8277312°</u>	Long: <u>-84.7845732°</u>	Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Rainsville silt loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>X</u> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>X</u> No <u>      </u>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>X</u> Hydric Soil Present?    Yes <u>      </u> No <u>X</u> Wetland Hydrology Present?    Yes <u>      </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>X</u>
Remarks: Wetland parameters are not present at DP-UPL-WSJ-011; this is an upland area in a agricultural drainage. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection.	

**VEGETATION – Use scientific names of plants.**

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# SOIL

Sampling Point: DP-UPL-WSJ-011

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-16	10YR 3/2	100					Loamy/Clayey	clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks:  
No hydric soil indicators are met. The soil is hydric at DP-UPL-WSJ-011.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No indicators of wetland hydrology are observed. There is no wetland hydrology at DP-UPL-WSJ-011.

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/30/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-012</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>08 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>2-6</u>	Lat: <u>39.8122992°</u>	Long: <u>-84.7888035°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Miami silt loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  x  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>      </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?                    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?          Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All three wetland parameters are present at DP-WSJ-012; therefore, this area consists of a wetland. According to local three-month antecedent precipitation calculations, hydrologic and climatologic conditions were drier than normal at the time of data collection.	

**VEGETATION – Use scientific names of plants.**

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Herb Stratum	(Plot size: <u>  5  </u> )	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																																			
1.	<u><i>Typha angustifolia</i></u>	60	Yes	FACW																																																																																																																																																			
2.	<u><i>Carex vulpinoidea</i></u>	20	Yes	FACW																																																																																																																																																			
3.	<u><i>Scirpus atrovirens</i></u>	15	No	OBL																																																																																																																																																			
4.	<u><i>Glyceria striata</i></u>	5	No	OBL																																																																																																																																																			
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Woody Vine Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																																			
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	<b>Prevalence Index worksheet:</b>  <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: center;">Multiply by:</th> </tr> <tr> <td>OBL species <u>      20      </u></td> <td>x 1 = <u>      20      </u></td> </tr> <tr> <td>FACW species <u>      80      </u></td> <td>x 2 = <u>     160      </u></td> </tr> <tr> <td>FAC species <u>      0      </u></td> <td>x 3 = <u>      0      </u></td> </tr> <tr> <td>FACU species <u>      0      </u></td> <td>x 4 = <u>      0      </u></td> </tr> <tr> <td>UPL species <u>      0      </u></td> <td>x 5 = <u>      0      </u></td> </tr> <tr> <td>Column Totals: <u>     100      </u> (A)</td> <td><u>     180      </u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>     1.80      </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>      20      </u>	x 1 = <u>      20      </u>	FACW species <u>      80      </u>	x 2 = <u>     160      </u>	FAC species <u>      0      </u>	x 3 = <u>      0      </u>	FACU species <u>      0      </u>	x 4 = <u>      0      </u>	UPL species <u>      0      </u>	x 5 = <u>      0      </u>	Column Totals: <u>     100      </u> (A)	<u>     180      </u> (B)	Prevalence Index = B/A = <u>     1.80      </u>																																																																																																																																							
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Remarks: (Include photo numbers here or on a separate sheet.) The rapid test, dominance test, and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-012.																																																																																																																																																							



## SOIL

Sampling Point: DP-WSJ-012

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
(includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
One primary (oxidized rhizospheres on living roots) indicators and two secondary (FAC-neutral test & Geomorphic Position) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-012. Depression within agricultural drainage.			

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Preble</u>	Sampling Date: <u>6/30/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-012</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>8 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>2-6</u>	Lat: <u>39.8123498°</u>	Long: <u>-84.7887295°</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Miami silt loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>X</u> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>X</u> No <u>      </u>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>X</u> Hydric Soil Present?    Yes <u>      </u> No <u>X</u> Wetland Hydrology Present?    Yes <u>      </u> No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>X</u>
Remarks: Wetland parameters are not present at DP-UPL-WSJ-012; this is an upland area in a agricultural drainage. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection.	

**VEGETATION – Use scientific names of plants.**

<b>Tree Stratum</b> (Plot size: <u>30</u> ) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ <div style="text-align: right;">=Total Cover</div> <b>Sapling/Shrub Stratum</b> (Plot size: <u>15</u> ) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ <div style="text-align: right;">=Total Cover</div> <b>Herb Stratum</b> (Plot size: <u>5</u> ) 1. <u>Festuca rubra</u> 25                      Yes                      FACU 2. <u>Elymus canadensis</u> 25                      Yes                      FACU 3. <u>Solidago canadensis</u> 20                      Yes                      FACU 4. <u>Heracleum maximum</u> 15                      No                      FACU 5. <u>Phleum pratense</u> 10                      No                      FACU 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ <div style="text-align: right;">95                      =Total Cover</div> <b>Woody Vine Stratum</b> (Plot size: <u>30</u> ) 1. _____ 2. _____ <div style="text-align: right;">=Total Cover</div>	<div> <b>Dominance Test worksheet:</b>            Number of Dominant Species That Are OBL, FACW, or FAC:                      <u>0</u>                      (A)            Total Number of Dominant Species Across All Strata:                      <u>3</u>                      (B)            Percent of Dominant Species That Are OBL, FACW, or FAC:                      <u>0.0%</u>                      (A/B)         </div> <div> <b>Prevalence Index worksheet:</b>  <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: right;">Total % Cover of:</td> <td style="width:50%; text-align: right;">Multiply by:</td> </tr> <tr> <td>OBL species    <u>0</u></td> <td>x 1 =    <u>0</u></td> </tr> <tr> <td>FACW species    <u>0</u></td> <td>x 2 =    <u>0</u></td> </tr> <tr> <td>FAC species    <u>0</u></td> <td>x 3 =    <u>0</u></td> </tr> <tr> <td>FACU species    <u>95</u></td> <td>x 4 =    <u>380</u></td> </tr> <tr> <td>UPL species    <u>0</u></td> <td>x 5 =    <u>0</u></td> </tr> <tr> <td>Column Totals:    <u>95</u>                      (A)</td> <td><u>380</u>                      (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =    <u>4.00</u></td> </tr> </table> </div> <div> <b>Hydrophytic Vegetation Indicators:</b>  <u>      </u> 1 - Rapid Test for Hydrophytic Vegetation  <u>      </u> 2 - Dominance Test is &gt;50%  <u>      </u> 3 - Prevalence Index is ≤3.0<sup>1</sup>  <u>      </u> 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.         </div> <div> <b>Hydrophytic Vegetation Present?</b>                      Yes <u>      </u>    No <u>X</u> </div>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>95</u>	x 4 = <u>380</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>380</u> (B)	Prevalence Index = B/A = <u>4.00</u>	
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Prevalence Index = B/A = <u>4.00</u>																	
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation indicators are met. The vegetation is not hydrophytic at DP-UPL-WSJ-012.																	



## SOIL

Sampling Point: DP-UPL-WSJ-012

[illegible]

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
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<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
(includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
No indicators of wetland hydrology are observed. There is no wetland hydrology at DP-UPL-WSJ-012.			

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Jackson/Preble</u>	Sampling Date: <u>06/29/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-017</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>S7 T8N R1E</u>	
Landform (hillside, terrace, etc.): <u>agricultural depression</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>0-2</u>	Lat: <u>39.810741</u>	Long: <u>-84.801314</u> Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Kokomo silt loam</u>	NW1 classification: <u>N/A</u>	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed? Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic? (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: All three wetland parameters were present at the data collection location; therefore, this area consists of a PEM wetland; an agricultural depression. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Carex frankii</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Echinochloa crus-galli</u></td><td></td><td style="text-align: center;">65</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. <u>Glycine max</u></td><td></td><td style="text-align: center;">20</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>4. <u>Juncus tenuis</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>5. <u>Rumex crispus</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>6. <u>Solidago canadensis</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>7. <u>Plantago major</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>8. <u>Oxalis stricta</u></td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: center;">142</td> <td colspan="2" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>          </u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Remarks: (Include photo numbers here or on a separate sheet.) The dominance test and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-017.																																																																																																																																																							



## SOIL

Sampling Point: DP-WSJ-017

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR 3/1	100					Loamy/Clayey	Silty clay loam
10-16	10YR 4/1	80	7.5YR 3/4	20	C	PL	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicators F3 Depleted Matrix and Depleted below Dark Surface (A11) are met. The soil is hydric at DP-WSJ-017.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One primary (Oxidized Rhizospheres on Living Roots) and two secondary (geomorphic position and Crayfish Burrows) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-017. Agricultural depression.

**U.S. Army Corps of Engineers**  
**WETLAND DETERMINATION DATA SHEET – Midwest Region**  
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024  
Requirement Control Symbol EXEMPT:  
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: New Westville to West Manchester City/County: Jackson/Preble Sampling Date: 10/17/2023  
Applicant/Owner: AES State: OH Sampling Point: DP-UPL-WSJ-017  
Investigator(s): Stuart Jennings, Hannah Saxena Section, Township, Range: 07 8N 1E  
Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): concave  
Slope (%): 6-12 Lat: 39.810831 Long: -84.801334 Datum: NAD 83 OH.S  
Soil Map Unit Name: Miami loam NWI classification: NA  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes        No X (If no, explain in Remarks.)  
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No         
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes        No X  
Hydric Soil Present? Yes        No X  
Wetland Hydrology Present? Yes        No X

Is the Sampled Area  
within a Wetland? Yes        No X

Remarks:

Wetland parameters are not Present at DP-UPL-WSJ-017. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Area is in between two agricultural fields.

**VEGETATION – Use scientific names of plants.**

Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15</u> )			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5</u> )			
1. <u>Festuca rubra</u>		<u>80</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Glycine max</u>		<u>10</u>	<u>No</u>	<u>UPL</u>
3. <u>Cornus amomum</u>		<u>5</u>	<u>No</u>	<u>FACU</u>
4. <u>Hackelia virginiana</u>		<u>5</u>	<u>No</u>	<u>FACU</u>
5.				
6.				
7.				
8.				
9.				
10.				
		<u>100</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>      </u> )			
1.				
2.				
		=Total Cover		

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>90</u>	x 4 = <u>360</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>100</u> (A)	<u>410</u> (B)
Prevalence Index = B/A = <u>4.10</u>	

**Hydrophytic Vegetation Indicators:**

       1 - Rapid Test for Hydrophytic Vegetation

       2 - Dominance Test is >50%

       3 - Prevalence Index is ≤3.0<sup>1</sup>

       4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

       Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes        No X

Remarks: (Include photo numbers here or on a separate sheet.)

No indicators of hydrophytic vegetation are met. The vegetation is not hydrophytic at DP-UPL-WSJ-017.



# SOIL

Sampling Point: DP-UPL-WSJ-017

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 4/2	100					Loamy/Clayey	
4-16	10YR 4/3	100					Loamy/Clayey	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.					<sup>2</sup> Location: PL=Pore Lining, M=Matrix.			

<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)  <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
Remarks: No hydric soil indicators are met. The soil is not hydric at DP-UPL-WSJ-017.	

# HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>				<u>Secondary Indicators (minimum of two required)</u>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)					
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)					
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<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)					
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<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)					
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)						
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)						

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: No indicators of wetland hydrology are observed. There is not wetland hydrology at DP-UPL-WSJ-017.	

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Jackson/Preble</u>	Sampling Date: <u>10/17/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-018</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>		Section, Township, Range: <u>07 8N 1E</u>
Landform (hillside, terrace, etc.): <u>stream floodplain</u>		Local relief (concave, convex, none): <u>concave</u>
Slope (%): <u>0-1</u>	Lat: <u>39.8146320</u>	Long: <u>-84.8063561</u> Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Rossburg silt loam, moderately wet, sandy substratum; occ. Flooded</u>		NWI classification: <u>R4SBC</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (If no, explain in Remarks.)		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> significantly disturbed? Are "Normal Circumstances" present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally problematic? (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: All Three wetland parameters are present at DP-WSJ-018; this area is a PEM wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>30</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Salix nigra</u></td><td></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td></td> <td></td> <td style="text-align: center;">15</td> <td colspan="2" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>15</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td></td> <td></td> <td></td> <td colspan="2" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>5</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u>Typha latifolia</u></td><td></td><td style="text-align: center;">35</td><td style="text-align: center;">Yes</td><td style="text-align: center;">OBL</td></tr> <tr><td>2. <u>Phalaris arundinacea</u></td><td></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>3. <u>Solidago canadensis</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4. <u>Lycopus americanus</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>5. <u>Symphyotrichum novae-angliae</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>6. <u>Eupatorium perfoliatum</u></td><td></td><td style="text-align: center;">4</td><td style="text-align: center;">No</td><td style="text-align: center;">OBL</td></tr> <tr><td>7. <u>Symphyotrichum lateriflorum</u></td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>8. <u>Sericocarpus linifolius</u></td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>9. <u>Impatiens capensis</u></td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>10. <u>Juncus torreyi</u></td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr> <td></td> <td></td> <td style="text-align: center;">100</td> <td colspan="2" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: _____)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td></td> <td></td> <td></td> <td colspan="2" style="text-align: right;">=Total Cover</td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Indicator Status	1. _____					2. _____								=Total Cover		<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Dominance Test worksheet:</b>          Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)          Total Number of Dominant Species Across All Strata: <u>3</u> (B)          Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)       </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Prevalence Index worksheet:</b>  <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>61</u></td> <td>x 1 = <u>61</u></td> </tr> <tr> <td>FACW species <u>41</u></td> <td>x 2 = <u>82</u></td> </tr> <tr> <td>FAC species <u>1</u></td> <td>x 3 = <u>3</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>2</u></td> <td>x 5 = <u>10</u></td> </tr> <tr> <td>Column Totals: <u>115</u> (A)</td> <td><u>196</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.70</u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px;"> <b>Hydrophytic Vegetation Indicators:</b>  <u>1</u> - Rapid Test for Hydrophytic Vegetation  <input checked="" type="checkbox"/> <u>2</u> - Dominance Test is &gt;50%  <input checked="" type="checkbox"/> <u>3</u> - Prevalence Index is ≤3.0<sup>1</sup>  <u>4</u> - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.       </div> <div style="border: 1px solid black; padding: 5px;"> <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> </div>	Total % Cover of:	Multiply by:	OBL species <u>61</u>	x 1 = <u>61</u>	FACW species <u>41</u>	x 2 = <u>82</u>	FAC species <u>1</u>	x 3 = <u>3</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>2</u>	x 5 = <u>10</u>	Column Totals: <u>115</u> (A)	<u>196</u> (B)	Prevalence Index = B/A = <u>1.70</u>	
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Remarks: (Include photo numbers here or on a separate sheet.) The dominance test and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-018.																																																																																																																																																																							



**VEGETATION Continued** – Use scientific names of plants.

 Sampling Point: DP-WSJ-018

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
	<u>15</u>	=Total Cover	
<u>Sapling/Shrub Stratum</u>			
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
		=Total Cover	
<u>Herb Stratum</u>			
11. <i>Epilobium coloratum</i>	<u>2</u>	No	OBL
12. <i>Juncus tenuis</i>	<u>1</u>	No	FAC
13. _____	_____	_____	_____
14. _____	_____	_____	_____
15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
21. _____	_____	_____	_____
22. _____	_____	_____	_____
	<u>100</u>	=Total Cover	
<u>Woody Vine Stratum</u>			
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
		=Total Cover	

**Definitions of Vegetation Strata:**

**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall.

**Woody Vine** – All woody vines greater than 3.28 ft in height.

Remarks: (Include photo numbers here or on a separate sheet.)

## SOIL

Sampling Point: DP-WSJ-018

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	10YR 3/2	100					Loamy/Clayey	Silty clay loam
5-16	10YR 4/1	80	7.5YR 3/4	20	C	M	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Remarks:  
Hydric soil indicators A11 Depleted Below Dark Surface and F3 Depleted Mtrix are met. The soil is hydric at DP-WSJ-018.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
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<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input checked="" type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
Two primary (Oxidized Rhizospheres on Living Roots and other) and three secondary (geomorphic position, Drainage Patterns, and FAC-Neutral Test) indicators of wetland hydrology are observed. The "other" hydrology indicator observed was the wetland was abutting a stream. There is wetland hydrology at DP-WSJ-018. The wetland area consisted of a depressional floodplain wetland intersected by an on-site stream.



<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Jackson/Preble</u>	Sampling Date: <u>10/17/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-018</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>		Section, Township, Range: <u>07 8N 1E</u>
Landform (hillside, terrace, etc.): <u>terrace</u>		Local relief (concave, convex, none): <u>concave</u>
Slope (%): <u>0-1</u>	Lat: <u>39.8145748</u>	Long: <u>-84.8063467</u>
Soil Map Unit Name: <u>Rossburg silt loam, moderately wet, sandy substratum</u>		Datum: <u>NAD 83 OH.S</u>
Soil NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>      </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>  X  </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>      </u> No <u>  X  </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>  X  </u>
Remarks: DP-UPL-WSJ-018 is located upland on an ingress/egress for agricultural farming equipment. The vegetation is not hydrophytic, the soil is hydric but was compacted significantly at a depth of 12 inches, and there is no wetland hydrology at DP-UPL-WSJ-018. DP-UPL-WSJ-018 is not located in a wetland area. According to local three month antecedent precipitation calculations, hydrologic and climatologic conditions were drier than normal at	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: left;">(Plot size: <u>30</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: left;">(Plot size: <u>15</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: left;">(Plot size: <u>5</u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Tridens flavus</u></td><td style="text-align: center;">50</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>2.</td><td><u>Trifolium pratense</u></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>3.</td><td><u>Cornus amomum</u></td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>4.</td><td><u>Hackelia virginiana</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>5.</td><td><u>Setaria viridis</u></td><td style="text-align: center;">3</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>6.</td><td><u>Solidago canadensis</u></td><td style="text-align: center;">3</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>7.</td><td><u>Cirsium arvense</u></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>8.</td><td><u>Plantago major</u></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>9.</td><td><u>Symphotrichum lateriflorum</u></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>10.</td><td><u>Rosa multiflora</u></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">102</td> <td colspan="2" style="text-align: right;">=Total Cover</td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: left;">(Plot size: <u>      </u> )</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: right;">=Total Cover</td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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Remarks: (Include photo numbers here or on a separate sheet.) No indicators of hydrophytic vegetation are met. The vegetation is not hydrophytic at DP-UPL-WSJ-018.																																																																																																																																																																							

**VEGETATION Continued** – Use scientific names of plants.

 Sampling Point: DP-UPL-WSJ-018

<u>Tree Stratum</u>	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
	_____ =Total Cover		
<u>Sapling/Shrub Stratum</u>			
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
	_____ =Total Cover		
<u>Herb Stratum</u>			
11. <i>Lysimachia nummularia</i>	2	No	FACW
12. <i>Toxicodendron radicans</i>	1	No	FAC
13. _____	_____	_____	_____
14. _____	_____	_____	_____
15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
21. _____	_____	_____	_____
22. _____	_____	_____	_____
	102 =Total Cover		
<u>Woody Vine Stratum</u>			
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	_____ =Total Cover		

**Definitions of Vegetation Strata:**

**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall.

**Woody Vine** – All woody vines greater than 3.28 ft in height.

Remarks: (Include photo numbers here or on a separate sheet.)



# SOIL

Sampling Point: DP-UPL-WSJ-018

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-3	10YR 3/2	100					Sandy	Sandy silt
3-12	10YR 4/2	70	10YR 4/6	30	C	M	Sandy	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: <input type="checkbox"/> compacted soils Depth (inches): <input type="checkbox"/> 12	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator S5 sandy redox is met. This area serves as a ingress/egress for agricultural farming equipment. The soil is hydric at DP-UPL-WSJ-018.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="checkbox"/> Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="checkbox"/> Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="checkbox"/> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No indicators of wetland hydrology are observed. There is not wetland hydrology at DP-UPL-WSJ-018.

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Jackson/Preble</u>	Sampling Date: <u>10/17/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-019</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>07 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>agricultural drainage</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>6-12</u>	Lat: <u>39.8157024</u>	Long: <u>-84.8063561</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Miami loam, eroded.</u>	NW1 classification: <u>N/A</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  Y  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All Three wetland parameters are present at DP-WSJ-019; this area is a PEM wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Agricultural Drainage.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Tree Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>  30  </u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Sapling/Shrub Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>  15  </u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Herb Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>  5  </u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1. <u>Typha latifolia</u></td><td></td><td style="text-align: center;">95</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACW</td></tr> <tr><td>2. <u>Cirsium arvense</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>9. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">100 =Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Woody Vine Stratum</th> <th style="text-align: left; border-bottom: 1px solid black;">(Plot size: <u>      </u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table>	Tree Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	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Remarks: (Include photo numbers here or on a separate sheet.) The dominance test and prevalence index are met. The vegetation is hydrophytic at DP-WSJ-017.																																																																																																																																																																							



# SOIL

Sampling Point: DP-WSJ-019

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5	10YR 4/2	100					Loamy/Clayey	Silty clay loam
5-16	10YR 4/2	90	7.5YR 3/4	10	C	M	Loamy/Clayey	Distinct redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicators F3 Depleted Matrix is met. The soil is hydric at DP-WSJ-019.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One primary (Oxidized Rhizospheres on Living Roots) and two secondary (geomorphic position and the FAC-Neutral Test) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-019. The wetland area consisted of a mowed agricultural drainage.

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Jackson/Preble</u>	Sampling Date: <u>10/17/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-019</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>07 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>concave</u>	
Slope (%): <u>6-12</u>	Lat: <u>39.8156471</u>	Long: <u>-84.8046093</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Miami loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>      </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>  X  </u> Hydric Soil Present?    Yes <u>      </u> No <u>  X  </u> Wetland Hydrology Present?    Yes <u>      </u> No <u>  X  </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>  X  </u>
Remarks: DP-UPL-WSJ-019 is located upland on between 2 agricultural fields. The vegetation is not hydrophytic, the soil is not hydric, and there is no wetland hydrology at DP-UPL-WSJ-019. DP-UPL-WSJ-019 is not located in a wetland area. According to local three-month antecedent precipitation calculations, hydrologic and climatic conditions were drier than normal at the time of data collection.	

**VEGETATION – Use scientific names of plants.**

<table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>  30  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>  15  </u>)</th> <th></th> <th></th> <th></th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>  5  </u>)</th> <th></th> <th></th> <th></th> </tr> <tr><td>1.</td><td><u>Festuca rubra</u></td><td style="text-align: center;">80</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2.</td><td><u>Glycine max</u></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>3.</td><td><u>Cornus amomum</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>4.</td><td><u>Hackelia virginiana</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr><td>6.</td><td></td><td></td><td></td><td></td></tr> <tr><td>7.</td><td></td><td></td><td></td><td></td></tr> <tr><td>8.</td><td></td><td></td><td></td><td></td></tr> <tr><td>9.</td><td></td><td></td><td></td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">100 =Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>      </u>)</th> <th></th> <th></th> <th></th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table>	Tree Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	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# SOIL

Sampling Point: DP-UPL-WSJ-019

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 4/2	100					Loamy/Clayey	
4-16	10YR 4/3	100					Loamy/Clayey	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.					<sup>2</sup> Location: PL=Pore Lining, M=Matrix.			

<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)  <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
Remarks: No hydric soil indicators are met. The soil is not hydric at DP-UPL-WSJ-019.	

# HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>				<u>Secondary Indicators (minimum of two required)</u>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)					
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)					
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)					
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)					
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)					
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)					
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)					
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)					
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)						
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)						

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: No indicators of wetland hydrology are observed. There is not wetland hydrology at DP-UPL-WSJ-019.	

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Jackson/Preble</u>	Sampling Date: <u>10/17/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-020</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u> Section, Township, Range: <u>04 8N 1E</u>		
Landform (hillside, terrace, etc.): <u>agricultural drainage</u> Local relief (concave, convex, none): <u>concave</u>		
Slope (%): <u>0-1</u> Lat: <u>39.8279509</u> Long: <u>-84.7769100</u> Datum: <u>NAD 83 OH.S</u>		
Soil Map Unit Name: <u>Kokomo silt loam</u> NWI classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  Y  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?                    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?        Yes <u>  X  </u> No <u>      </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>  X  </u> No <u>      </u>
Remarks: All Three wetland parameters are present at DP-WSJ-020; this area is a PEM wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Many failed tiles observed in wetland.	

**VEGETATION – Use scientific names of plants.**

<b>Tree Stratum</b> (Plot size: <u>  30  </u> ) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ <div style="text-align: right;">=Total Cover</div> <b>Sapling/Shrub Stratum</b> (Plot size: <u>  15  </u> ) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ <div style="text-align: right;">=Total Cover</div> <b>Herb Stratum</b> (Plot size: <u>  5  </u> ) 1. <u>Typha latifolia</u> 80            Yes            FACW 2. <u>Salix interior</u> 8             No             FACW 3. <u>Apocynum cannabinum</u> 8             No             FAC 4. <u>Campsis radicans</u> 4             No             FACU 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ <div style="text-align: right;">100 =Total Cover</div> <b>Woody Vine Stratum</b> (Plot size: <u>      </u> ) 1. _____ 2. _____ <div style="text-align: right;">=Total Cover</div>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>      1      </u> (A) Total Number of Dominant Species Across All Strata: <u>      1      </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>  100.0%  </u> (A/B)  <b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:40%; text-align: right;">Total % Cover of:</td> <td style="width:10%;"></td> <td style="width:10%; text-align: right;">Multiply by:</td> <td style="width:40%;"></td> </tr> <tr> <td>OBL species</td> <td style="text-align: center;"><u>  0  </u></td> <td style="text-align: right;">x 1 =</td> <td style="text-align: center;"><u>  0  </u></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;"><u> 88 </u></td> <td style="text-align: right;">x 2 =</td> <td style="text-align: center;"><u>176 </u></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;"><u>  8 </u></td> <td style="text-align: right;">x 3 =</td> <td style="text-align: center;"><u> 24 </u></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;"><u>  4 </u></td> <td style="text-align: right;">x 4 =</td> <td style="text-align: center;"><u> 16 </u></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;"><u>  0 </u></td> <td style="text-align: right;">x 5 =</td> <td style="text-align: center;"><u>  0 </u></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;"><u> 100 </u> (A)</td> <td></td> <td style="text-align: center;"><u> 216 </u> (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = <u>     2.16     </u></td> </tr> </table> <b>Hydrophytic Vegetation Indicators:</b> <u>      </u> 1 - Rapid Test for Hydrophytic Vegetation <u>  X  </u> 2 - Dominance Test is >50% <u>  X  </u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>      </u> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	Total % Cover of:		Multiply by:		OBL species	<u>  0  </u>	x 1 =	<u>  0  </u>	FACW species	<u> 88 </u>	x 2 =	<u>176 </u>	FAC species	<u>  8 </u>	x 3 =	<u> 24 </u>	FACU species	<u>  4 </u>	x 4 =	<u> 16 </u>	UPL species	<u>  0 </u>	x 5 =	<u>  0 </u>	Column Totals:	<u> 100 </u> (A)		<u> 216 </u> (B)	Prevalence Index = B/A = <u>     2.16     </u>			
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# SOIL

Sampling Point: DP-WSJ-020

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 3/2	80	10YR 3/6	20	C	PL	Loamy/Clayey	clay loam
6-16	10YR 4/2	100					Loamy/Clayey	clay loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

<b>Hydric Soil Indicators:</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Dark Surface (S7) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Thick Dark Surface (A12) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) <input type="checkbox"/> Redox Depressions (F8)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> Coast Prairie Redox (A16) <input type="checkbox"/> Iron-Manganese Masses (F12) <input type="checkbox"/> Red Parent Material (F21) <input type="checkbox"/> Very Shallow Dark Surface (F22) <input type="checkbox"/> Other (Explain in Remarks)  <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
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<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator F6 redox dark surface is met. The soil is hydric at DP-WSJ-020.

# HYDROLOGY

<b>Wetland Hydrology Indicators:</b>			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One primary (Oxidized Rhizospheres on Living Roots) and three secondary (drainage patterns, geomorphic position, and the FAC-Neutral Test) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-020. The wetland area consisted of a poorly maintained agricultural drainage - several failed tiles were present in wetland.

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Jackson/Preble</u>	Sampling Date: <u>10/17/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-020</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>04 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>terrace</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>0-1</u>	Lat: <u>39.8279513</u>	Long: <u>-84.7768255</u>
	Datum: <u>NAD 83 OH.S</u>	
Soil Map Unit Name: <u>Kokomo silt loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>      </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>  X  </u> Hydric Soil Present?    Yes <u>      </u> No <u>  X  </u> Wetland Hydrology Present?    Yes <u>      </u> No <u>  X  </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>  X  </u>
Remarks: DP-UPL-WSJ-020 is located upland on the fringed of an agricultural corn field. The vegetation is not hydrophytic, the soil is not hydric, and there is no wetland hydrology at DP-UPL-WSJ-020. DP-UPL-WSJ-020 is not located in a wetland area. According to local three-month antecedent precipitation calculations, hydrologic and climatologic conditions were drier than normal at the time of data collection.	

**VEGETATION – Use scientific names of plants.**

<table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum</th> <th style="text-align: center;">(Plot size: <u>  30  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td colspan="2"></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum</th> <th style="text-align: center;">(Plot size: <u>  15  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td colspan="2"></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum</th> <th style="text-align: center;">(Plot size: <u>  5  </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td><u>Campsis radicans</u></td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2.</td><td><u>Festuca sp</u></td><td style="text-align: center;">30</td><td style="text-align: center;">Yes</td><td style="text-align: center;">UPL</td></tr> <tr><td>3.</td><td><u>Zea mays</u></td><td style="text-align: center;">15</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>4.</td><td><u>Ambrosia trifida</u></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>5.</td><td><u>Asclepias syriaca</u></td><td style="text-align: center;">3</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>6.</td><td><u>Daucus carota</u></td><td style="text-align: center;">3</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>7.</td><td><u>Cirsium arvense</u></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>8.</td><td><u>Solidago canadensis</u></td><td style="text-align: center;">1</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>9.</td><td><u>Xanthium strumarium</u></td><td style="text-align: center;">1</td><td style="text-align: center;">No</td><td></td></tr> <tr><td>10.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">100 =Total Cover</td> <td colspan="2"></td> </tr> </table> <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum</th> <th style="text-align: center;">(Plot size: <u>      </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1.</td><td></td><td></td><td></td><td></td></tr> <tr><td>2.</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td colspan="2"></td> </tr> </table>	Tree Stratum	(Plot size: <u>  30  </u> )	Absolute % Cover	Dominant Species?	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Indicator Status	1.					2.							=Total Cover			<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Dominance Test worksheet:</b>           Number of Dominant Species That Are OBL, FACW, or FAC: <u>      0      </u> (A)           Total Number of Dominant Species Across All Strata: <u>      2      </u> (B)           Percent of Dominant Species That Are OBL, FACW, or FAC: <u>      0.0%      </u> (A/B)       </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Prevalence Index worksheet:</b>  <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>      0      </u></td> <td>x 1 = <u>      0      </u></td> </tr> <tr> <td>FACW species <u>      0      </u></td> <td>x 2 = <u>      0      </u></td> </tr> <tr> <td>FAC species <u>      5      </u></td> <td>x 3 = <u>     15      </u></td> </tr> <tr> <td>FACU species <u>     46      </u></td> <td>x 4 = <u>     184      </u></td> </tr> <tr> <td>UPL species <u>     48      </u></td> <td>x 5 = <u>     240      </u></td> </tr> <tr> <td>Column Totals: <u>     99      </u> (A)</td> <td><u>     439      </u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>     4.43      </u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px;"> <b>Hydrophytic Vegetation Indicators:</b>  <u>      </u> 1 - Rapid Test for Hydrophytic Vegetation  <u>      </u> 2 - Dominance Test is &gt;50%  <u>      </u> 3 - Prevalence Index is ≤3.0<sup>1</sup>  <u>      </u> 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.       </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <b>Hydrophytic Vegetation Present?</b>                      Yes <u>      </u>    No <u>  X  </u> </div>	Total % Cover of:	Multiply by:	OBL species <u>      0      </u>	x 1 = <u>      0      </u>	FACW species <u>      0      </u>	x 2 = <u>      0      </u>	FAC species <u>      5      </u>	x 3 = <u>     15      </u>	FACU species <u>     46      </u>	x 4 = <u>     184      </u>	UPL species <u>     48      </u>	x 5 = <u>     240      </u>	Column Totals: <u>     99      </u> (A)	<u>     439      </u> (B)	Prevalence Index = B/A = <u>     4.43      </u>	
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Remarks: (Include photo numbers here or on a separate sheet.) No indicators of hydrophytic vegetation are met. The vegetation is not hydrophytic at DP-UPL-WSJ-020.																																																																																																																																																																							



## SOIL

Sampling Point: DP-UPL-WSJ-020

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 3/2	100					Loamy/Clayey	sandy clay loam
4-16	10YR 4/4	100					Loamy/Clayey	silty clay loam
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.					<sup>2</sup> Location: PL=Pore Lining, M=Matrix.			
<b>Hydric Soil Indicators:</b>					<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>			
<input type="checkbox"/> Histosol (A1)					<input type="checkbox"/> Sandy Gleyed Matrix (S4)			
<input type="checkbox"/> Histic Epipedon (A2)					<input type="checkbox"/> Sandy Redox (S5)			
<input type="checkbox"/> Black Histic (A3)					<input type="checkbox"/> Stripped Matrix (S6)			
<input type="checkbox"/> Hydrogen Sulfide (A4)					<input type="checkbox"/> Dark Surface (S7)			
<input type="checkbox"/> Stratified Layers (A5)					<input type="checkbox"/> Loamy Mucky Mineral (F1)			
<input type="checkbox"/> 2 cm Muck (A10)					<input type="checkbox"/> Loamy Gleyed Matrix (F2)			
<input type="checkbox"/> Depleted Below Dark Surface (A11)					<input type="checkbox"/> Depleted Matrix (F3)			
<input type="checkbox"/> Thick Dark Surface (A12)					<input type="checkbox"/> Redox Dark Surface (F6)			
<input type="checkbox"/> Sandy Mucky Mineral (S1)					<input type="checkbox"/> Depleted Dark Surface (F7)			
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)					<input type="checkbox"/> Redox Depressions (F8)			
					<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
<b>Restrictive Layer (if observed):</b>								
Type: _____								
Depth (inches): _____								
							<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>	
Remarks: No hydric soil indicators are met. The soil is not hydric at DP-UPL-WSJ-020.								

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
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<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		
<b>Field Observations:</b>			
Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____	
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____	
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No indicators of wetland hydrology are observed. There is not wetland hydrology at DP-UPL-WSJ-020.			

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Jackson/Preble</u>	Sampling Date: <u>10/18/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-WSJ-021</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>		
Section, Township, Range: <u>04 8N 1E</u>		
Landform (hillside, terrace, etc.): <u>toeslope</u>		
Local relief (concave, convex, none): <u>concave</u>		
Slope (%): <u>6-12</u>	Lat: <u>39.8174742°N</u>	Long: <u>-84.7755317°W</u>
Datum: <u>NAD 83 OH.S</u>		
Soil Map Unit Name: <u>Miami loam, eroded &amp; Kokomo silt loam</u>		
NW1 classification: <u>NA</u>		
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  Y  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>      </u> No <u>  X  </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>  X  </u> No <u>      </u> Hydric Soil Present?    Yes <u>  X  </u> No <u>      </u> Wetland Hydrology Present?    Yes <u>  X  </u> No <u>      </u>	<table style="width:100%;"> <tr> <td style="width:60%;"><b>Is the Sampled Area within a Wetland?</b></td> <td style="width:40%;">Yes <u>  X  </u>    No <u>      </u></td> </tr> </table>	<b>Is the Sampled Area within a Wetland?</b>	Yes <u>  X  </u> No <u>      </u>
<b>Is the Sampled Area within a Wetland?</b>	Yes <u>  X  </u> No <u>      </u>		
Remarks: All Three wetland parameters are present at DP-WSJ-021; this area is a PEM wetland. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection. Stormwater input into this wetland.			

**VEGETATION – Use scientific names of plants.**

<table style="width:100%;"> <tr> <td style="width:60%;">Tree Stratum</td> <td style="width:40%;">(Plot size: <u>  30  </u>)</td> </tr> <tr><td>1. _____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td></tr> <tr><td colspan="2" style="text-align: right;">=Total Cover</td></tr> </table> <table style="width:100%;"> <tr> <td style="width:60%;">Sapling/Shrub Stratum</td> <td style="width:40%;">(Plot size: <u>  15  </u>)</td> </tr> <tr><td>1. _____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td></tr> <tr><td colspan="2" style="text-align: right;">=Total Cover</td></tr> </table> <table style="width:100%;"> <tr> <td style="width:60%;">Herb Stratum</td> <td style="width:40%;">(Plot size: <u>  5  </u>)</td> </tr> <tr><td>1. <u>Typha latifolia</u></td><td style="text-align: center;">30</td></tr> <tr><td>2. <u>Solidago canadensis</u></td><td style="text-align: center;">30</td></tr> <tr><td>3. <u>Apocynum cannabinum</u></td><td style="text-align: center;">15</td></tr> <tr><td>4. <u>Phalaris arundinacea</u></td><td style="text-align: center;">15</td></tr> <tr><td>5. <u>Mentha spicata</u></td><td style="text-align: center;">5</td></tr> <tr><td>6. <u>Euthamia graminifolia</u></td><td style="text-align: center;">3</td></tr> <tr><td>7. <u>Sericocarpus linifolius</u></td><td style="text-align: center;">2</td></tr> <tr><td>8. _____</td><td>_____</td></tr> <tr><td>9. _____</td><td>_____</td></tr> <tr><td>10. _____</td><td>_____</td></tr> <tr><td colspan="2" style="text-align: right;">100 =Total Cover</td></tr> </table> <table style="width:100%;"> <tr> <td style="width:60%;">Woody Vine Stratum</td> <td style="width:40%;">(Plot size: <u>      </u>)</td> </tr> <tr><td>1. _____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td></tr> <tr><td colspan="2" style="text-align: right;">=Total Cover</td></tr> </table>	Tree Stratum	(Plot size: <u>  30  </u> )	1. _____	_____	2. _____	_____	3. _____	_____	4. _____	_____	5. _____	_____	=Total Cover		Sapling/Shrub Stratum	(Plot size: <u>  15  </u> )	1. _____	_____	2. _____	_____	3. _____	_____	4. _____	_____	5. _____	_____	=Total Cover		Herb Stratum	(Plot size: <u>  5  </u> )	1. <u>Typha latifolia</u>	30	2. <u>Solidago canadensis</u>	30	3. <u>Apocynum cannabinum</u>	15	4. <u>Phalaris arundinacea</u>	15	5. <u>Mentha spicata</u>	5	6. <u>Euthamia graminifolia</u>	3	7. <u>Sericocarpus linifolius</u>	2	8. _____	_____	9. _____	_____	10. _____	_____	100 =Total Cover		Woody Vine Stratum	(Plot size: <u>      </u> )	1. _____	_____	2. _____	_____	=Total Cover		<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Dominance Test worksheet:</b>           Number of Dominant Species That Are OBL, FACW, or FAC: <u>      1      </u> (A)           Total Number of Dominant Species Across All Strata: <u>      2      </u> (B)           Percent of Dominant Species That Are OBL, FACW, or FAC: <u>  50.0%  </u> (A/B)       </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Prevalence Index worksheet:</b>  <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:40%;">Total % Cover of:</td> <td style="width:60%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>  30  </u></td> <td>x 1 = <u>  30  </u></td> </tr> <tr> <td>FACW species <u>  38  </u></td> <td>x 2 = <u>  76  </u></td> </tr> <tr> <td>FAC species <u>  0  </u></td> <td>x 3 = <u>  0  </u></td> </tr> <tr> <td>FACU species <u>  30  </u></td> <td>x 4 = <u> 120  </u></td> </tr> <tr> <td>UPL species <u>  2  </u></td> <td>x 5 = <u>  10  </u></td> </tr> <tr> <td>Column Totals: <u> 100  </u> (A)</td> <td><u> 236  </u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>  2.36  </u></td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Hydrophytic Vegetation Indicators:</b>  <u>      </u> 1 - Rapid Test for Hydrophytic Vegetation  <u>      </u> 2 - Dominance Test is &gt;50%  <u>  X  </u> 3 - Prevalence Index is ≤3.0<sup>1</sup>  <u>      </u> 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.       </div> <div style="border: 1px solid black; padding: 5px;"> <table style="width:100%;"> <tr> <td style="width:60%;"><b>Hydrophytic Vegetation Present?</b></td> <td style="width:40%;">Yes <u>  X  </u>    No <u>      </u></td> </tr> </table> </div>	Total % Cover of:	Multiply by:	OBL species <u>  30  </u>	x 1 = <u>  30  </u>	FACW species <u>  38  </u>	x 2 = <u>  76  </u>	FAC species <u>  0  </u>	x 3 = <u>  0  </u>	FACU species <u>  30  </u>	x 4 = <u> 120  </u>	UPL species <u>  2  </u>	x 5 = <u>  10  </u>	Column Totals: <u> 100  </u> (A)	<u> 236  </u> (B)	Prevalence Index = B/A = <u>  2.36  </u>		<b>Hydrophytic Vegetation Present?</b>	Yes <u>  X  </u> No <u>      </u>
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<b>Hydrophytic Vegetation Present?</b>	Yes <u>  X  </u> No <u>      </u>																																																																														
Remarks: (Include photo numbers here or on a separate sheet.) The prevalence index is met. The vegetation is hydrophytic at DP-WSJ-021.																																																																															



# SOIL

Sampling Point: DP-WSJ-021

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 4/2	90	7.5YR 3/4	10	C	PL	Sandy	sandy silt loam
4-16	10YR 4/3	100	7.5YR 3/4	10	C	PL	Loamy/Clayey	clay

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:  
Hydric soil indicator S5 Sandy Redox is met. The soil is hydric at DP-WSJ-021.

# HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present?        Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
One primary (Oxidized Rhizospheres on Living Roots) and three secondary (drainage patterns, geomorphic position, and the FAC-Neutral Test) indicators of wetland hydrology are observed. There is wetland hydrology at DP-WSJ-021. The wetland area consisted of a roadside swale on the edge of the highway with a steep slope. Large culvert outfalls into wetland - suggests storm drainage.

<b>U.S. Army Corps of Engineers</b> <b>WETLAND DETERMINATION DATA SHEET – Midwest Region</b> See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R	<b>OMB Control #: 0710-0024, Exp:11/30/2024</b> <b>Requirement Control Symbol EXEMPT:</b> <b>(Authority: AR 335-15, paragraph 5-2a)</b>
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Project/Site: <u>New Westville to West Manchester</u>	City/County: <u>Jackson/Preble</u>	Sampling Date: <u>10/18/2023</u>
Applicant/Owner: <u>AES</u>	State: <u>OH</u>	Sampling Point: <u>DP-UPL-WSJ-021</u>
Investigator(s): <u>Stuart Jennings, Hannah Saxena</u>	Section, Township, Range: <u>04 8N 1E</u>	
Landform (hillside, terrace, etc.): <u>hillside</u>	Local relief (concave, convex, none): <u>none</u>	
Slope (%): <u>6-12</u>	Lat: <u>39.8175212°N</u>	Long: <u>-84.7755157°W</u>
		Datum: <u>NAD 83 OH.S</u>
Soil Map Unit Name: <u>Miami loam</u>	NW1 classification: <u>NA</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?    Yes <u>      </u> No <u>  X  </u> (If no, explain in Remarks.)		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> significantly disturbed?    Are "Normal Circumstances" present?    Yes <u>  X  </u> No <u>      </u>		
Are Vegetation <u>  N  </u> , Soil <u>  N  </u> , or Hydrology <u>  N  </u> naturally problematic?    (If needed, explain any answers in Remarks.)		

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?    Yes <u>      </u> No <u>  X  </u> Hydric Soil Present?    Yes <u>      </u> No <u>  X  </u> Wetland Hydrology Present?    Yes <u>      </u> No <u>  X  </u>	<b>Is the Sampled Area within a Wetland?</b> Yes <u>      </u> No <u>  X  </u>
Remarks: Wetland parameters are not present at DP-UPL-WSJ-021. Hydrologic and climatologic data, over past 3 months, suggest drier than normal conditions at time of data collection.	

**VEGETATION – Use scientific names of plants.**

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Tree Stratum</th> <th style="text-align: center; border-bottom: 1px solid black;">(Plot size: <u>30</u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Sapling/Shrub Stratum</th> <th style="text-align: center; border-bottom: 1px solid black;">(Plot size: <u>15</u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>3. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Herb Stratum</th> <th style="text-align: center; border-bottom: 1px solid black;">(Plot size: <u>5</u> )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1. <u>Festuca pratensis</u></td><td></td><td style="text-align: center;">60</td><td style="text-align: center;">Yes</td><td style="text-align: center;">FACU</td></tr> <tr><td>2. <u>Setaria viridis</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>3. <u>Solidago canadensis</u></td><td></td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>4. <u>Plantago lanceolata</u></td><td></td><td style="text-align: center;">5</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>5. <u>Asclepias syriaca</u></td><td></td><td style="text-align: center;">3</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>6. <u>Daucus carota</u></td><td></td><td style="text-align: center;">3</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>7. <u>Euthamia graminifolia</u></td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>8. <u>Vernonia noveboracensis</u></td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">No</td><td style="text-align: center;">FACW</td></tr> <tr><td>9. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>10. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">95 =Total Cover</td> <td></td> <td></td> </tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Woody Vine Stratum</th> <th style="text-align: center; border-bottom: 1px solid black;">(Plot size: _____ )</th> <th style="text-align: center; border-bottom: 1px solid black;">Absolute % Cover</th> <th style="text-align: center; border-bottom: 1px solid black;">Dominant Species?</th> <th style="text-align: center; border-bottom: 1px solid black;">Indicator Status</th> </tr> <tr><td>1. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td style="text-align: right;">=Total Cover</td> <td></td> <td></td> </tr> </table>	Tree Stratum	(Plot size: <u>30</u> )	Absolute % Cover	Dominant Species?	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## SOIL

Sampling Point: DP-UPL-WSJ-021

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 4/2	100					Loamy/Clayey	
4-16	10YR 4/3	100					Loamy/Clayey	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes _____ No <u>X</u>
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Remarks:  
No hydric soil indicators are met. The soil is not hydric at DP-UPL-WSJ-021.

## HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

<b>Field Observations:</b> Surface Water Present?    Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present?      Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present?        Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
No indicators of wetland hydrology are observed. There is not wetland hydrology at DP-UPL-WSJ-021.

# Appendix C

## ORAM for Wetlands v. 5.0 Scoring Forms



<b>Site:</b> WAG-001	<b>Rater(s):</b> A. Glenn	<b>Date:</b> 06/12/2023
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0	0
max 6 pts.	subtotal

## Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

1	1
max 14 pts.	subtotal

## Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

9	10
max 30 pts.	subtotal

## Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input checked="" type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

9.5	19.5
max 20 pts.	subtotal

## Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☒ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☒ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input checked="" type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

19.5
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subtotal this page

<b>Site:</b> WAG-001	<b>Rater(s):</b> A. Glenn	<b>Date:</b> 06/12/2023
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19.5

subtotal first page

0	19.5
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

10	29.5
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 2 Emergent
- ☐ 1 Shrub
- ☐ 2 Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☒ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☒ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 1 Coarse woody debris >15cm (6in)
- ☐ 1 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

29.5

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WAG-002	<b>Rater(s):</b> A. Glenn, H. Saxena	<b>Date:</b> 06/13/2023
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<b>1</b>	<b>1</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>1</b>	<b>2</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>14</b>	<b>16</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☒ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input checked="" type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>11</b>	<b>27</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☒ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input checked="" type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>27</b>
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subtotal this page

<b>Site:</b> WAG-002	<b>Rater(s):</b> A. Glenn, H. Saxena	<b>Date:</b> 06/13/2023
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27

subtotal first page

0	27
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

5	32
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 2 Emergent
- ☐ 1 Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☒ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 2 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

32

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WAG-003	<b>Rater(s):</b> A. Glenn, H. Saxena	<b>Date:</b> 06/13/2023
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<b>0</b>	<b>0</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

<b>1</b>	<b>1</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>14.5</b>	<b>15.5</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☒ Regularly inundated/saturated (3)
- ☒ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input checked="" type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input checked="" type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>9</b>	<b>24.5</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☒ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input checked="" type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input checked="" type="checkbox"/> nutrient enrichment

<b>24.5</b>
subtotal this page

<b>Site:</b> WAG-003	<b>Rater(s):</b> A. Glenn, H. Saxena	<b>Date:</b> 06/13/2023
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24.5

subtotal first page

0	24.5
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

2	26.5
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 2 Emergent
- ☐ Shrub
- ☐ 1 Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☒ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

26.5

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WAG-005	<b>Rater(s):</b> A. Glenn / H. Saxena	<b>Date:</b> 06-15-23
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<b>0</b>	<b>0</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>1</b>	<b>1</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>13.5</b>	<b>14.5</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☒ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☐ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☒ Semi- to permanently inundated/saturated (4)
- ☒ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input checked="" type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input checked="" type="checkbox"/> filling/grading <input checked="" type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>6.5</b>	<b>21</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☒ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input checked="" type="checkbox"/> selective cutting <input checked="" type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input checked="" type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input checked="" type="checkbox"/> nutrient enrichment

<b>21</b>
subtotal this page

<b>Site:</b> WAG-005	<b>Rater(s):</b> HS/AG	<b>Date:</b> 06-15-23
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21

subtotal first page

0

21

max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

7

28

max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- 3

 Emergent
- 1

 Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- X

 Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- X

 Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussocks
- 1

 Coarse woody debris >15cm (6in)
- 1

 Standing dead >25cm (10in) dbh
- 2

 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

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**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WAG-006	<b>Rater(s):</b> A. Glenn / H. Sexana	<b>Date:</b> 06/15/23
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0	0
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

1	1
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

9	10
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input checked="" type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input checked="" type="checkbox"/> filling/grading <input checked="" type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

4.5	14.5
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☒ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☒ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input checked="" type="checkbox"/> grazing <input checked="" type="checkbox"/> clearcutting <input checked="" type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input checked="" type="checkbox"/> dredging <input type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

14.5
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subtotal this page

<b>Site:</b> WAG-006	<b>Rater(s):</b> A. Glenn / H. Sexana	<b>Date:</b> 06/15/23
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14.5

subtotal first page

0	14.5
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

1	15.5
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☒ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ Vegetated hummocks/tussocks
- ☐ Coarse woody debris >15cm (6in)
- ☐ Standing dead >25cm (10in) dbh
- ☐ Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

15.5

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WAG-007	<b>Rater(s):</b> A. Glenn / H. Saxena	<b>Date:</b> 06/15/23
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<b>0</b>	<b>0</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

<b>1</b>	<b>1</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>9</b>	<b>10</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input checked="" type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input checked="" type="checkbox"/> filling/grading <input checked="" type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>4.5</b>	<b>14.5</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☒ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☒ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☒ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input type="checkbox"/> grazing <input checked="" type="checkbox"/> clearcutting <input checked="" type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input checked="" type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>14.5</b>
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subtotal this page

<b>Site:</b> WAG-007	<b>Rater(s):</b> A. Glenn / H. Sexana	<b>Date:</b> 06/15/23
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14.5

subtotal first page

0	14.5
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

1	15.5
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 1 Emergent
- ☐ 1 Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☒ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 3 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

15.5

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WAG-008	<b>Rater(s):</b> A. Glenn / H. Saxena	<b>Date:</b> 10/17/23
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<b>1</b>	<b>1</b>
max 6 pts.	subtotal

**Metric 1. Wetland Area (size).**

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>2</b>	<b>3</b>
max 14 pts.	subtotal

**Metric 2. Upland buffers and surrounding land use.**

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>12.5</b>	<b>15.5</b>
max 30 pts.	subtotal

**Metric 3. Hydrology.**

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☒ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> ditch</li> <li><input checked="" type="checkbox"/> tile</li> <li><input type="checkbox"/> dike</li> <li><input type="checkbox"/> weir</li> <li><input checked="" type="checkbox"/> stormwater input</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> point source (nonstormwater)</li> <li><input type="checkbox"/> filling/grading</li> <li><input type="checkbox"/> road bed/RR track</li> <li><input type="checkbox"/> dredging</li> <li><input checked="" type="checkbox"/> other <u>Drain tile</u></li> </ul> |
|--|---|

<b>11.5</b>	<b>27</b>
max 20 pts.	subtotal

**Metric 4. Habitat Alteration and Development.**

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☒ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> mowing</li> <li><input type="checkbox"/> grazing</li> <li><input checked="" type="checkbox"/> clearcutting</li> <li><input checked="" type="checkbox"/> selective cutting</li> <li><input type="checkbox"/> woody debris removal</li> <li><input type="checkbox"/> toxic pollutants</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> shrub/sapling removal</li> <li><input type="checkbox"/> herbaceous/aquatic bed removal</li> <li><input type="checkbox"/> sedimentation</li> <li><input type="checkbox"/> dredging</li> <li><input type="checkbox"/> farming</li> <li><input type="checkbox"/> nutrient enrichment</li> </ul> |
|--|--|

**27**

subtotal this page

<b>Site:</b> WAG-008	<b>Rater(s):</b> A. Glenn / H. Saxena	<b>Date:</b> 10/17/23
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27

subtotal first page

0	27
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

9	36
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 2 Emergent
- ☐ Shrub
- ☐ 1 Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☒ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☒ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 1 Coarse woody debris >15cm (6in)
- ☐ 2 Standing dead >25cm (10in) dbh
- ☐ 1 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

36

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-001	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/12/2023
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<b>1</b>	<b>1</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>2</b>	<b>3</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>7</b>	<b>10</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input checked="" type="checkbox"/> other <u>clear cut by utility</u>

<b>10</b>	<b>20</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☒ None or none apparent (4)
- ☐ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> mowing <input type="checkbox"/> grazing <input checked="" type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input checked="" type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>20</b>
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subtotal this page

<b>Site:</b> WSJ-001	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/12/2023
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subtotal first page

0	20
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

4	24
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☒ 2 Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

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**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-002	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/12/2023
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<b>2</b>	<b>2</b>
max 6 pts.	subtotal

**Metric 1. Wetland Area (size).**

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)  
☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)  
☐ 10 to <25 acres (4 to <10.1ha) (4 pts)  
☐ 3 to <10 acres (1.2 to <4ha) (3 pts)  
☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)  
☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  
☐ <0.1 acres (0.04ha) (0 pts)

<b>2</b>	<b>4</b>
max 14 pts.	subtotal

**Metric 2. Upland buffers and surrounding land use.**

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  
☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  
☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  
☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  
☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)  
☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  
☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>19</b>	<b>23</b>
max 30 pts.	subtotal

**Metric 3. Hydrology.**

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)  
☐ Other groundwater (3)  
☒ Precipitation (1)  
☒ Seasonal/Intermittent surface water (3)  
☒ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)  
☐ 0.4 to 0.7m (15.7 to 27.6in) (2)  
☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)  
☒ Recovered (7)  
☒ Recovering (3)  
☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)  
☒ Between stream/lake and other human use (1)  
☒ Part of wetland/upland (e.g. forest), complex (1)  
☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)  
☐ Regularly inundated/saturated (3)  
☐ Seasonally inundated (2)  
☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> ditch<br><input checked="" type="checkbox"/> tile<br><input type="checkbox"/> dike<br><input type="checkbox"/> weir<br><input type="checkbox"/> stormwater input | <input type="checkbox"/> point source (nonstormwater)<br><input checked="" type="checkbox"/> filling/grading<br><input type="checkbox"/> road bed/RR track<br><input type="checkbox"/> dredging<br><input type="checkbox"/> other _____ |
|---|---|

<b>8</b>	<b>31</b>
max 20 pts.	subtotal

**Metric 4. Habitat Alteration and Development.**

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)  
☒ Recovered (3)  
☐ Recovering (2)  
☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)  
☐ Very good (6)  
☐ Good (5)  
☐ Moderately good (4)  
☐ Fair (3)  
☒ Poor to fair (2)  
☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)  
☐ Recovered (6)  
☒ Recovering (3)  
☐ Recent or no recovery (1)

Check all disturbances observed

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> mowing<br><input type="checkbox"/> grazing<br><input checked="" type="checkbox"/> clearcutting<br><input type="checkbox"/> selective cutting<br><input type="checkbox"/> woody debris removal<br><input type="checkbox"/> toxic pollutants | <input checked="" type="checkbox"/> shrub/sapling removal<br><input type="checkbox"/> herbaceous/aquatic bed removal<br><input type="checkbox"/> sedimentation<br><input type="checkbox"/> dredging<br><input checked="" type="checkbox"/> farming<br><input type="checkbox"/> nutrient enrichment |
|--|--|

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subtotal this page

<b>Site:</b> WSJ-002	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/12/2023
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subtotal first page

0	31
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

2	33
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 1 Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☒ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 1 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

33

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-003	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/14/2023
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<b>0</b>	<b>0</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

<b>1</b>	<b>1</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>14</b>	<b>15</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☒ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>8</b>	<b>23</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☒ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input checked="" type="checkbox"/> sedimentation <input checked="" type="checkbox"/> dredging <input type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>23</b>
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subtotal this page

<b>Site:</b> WSJ-003	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/14/2023
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subtotal first page

0	23
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

3	26
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 1 Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

26

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-004	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/14/2023
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2	2
max 6 pts.	subtotal

**Metric 1. Wetland Area (size).**

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)  
☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)  
☐ 10 to <25 acres (4 to <10.1ha) (4 pts)  
☐ 3 to <10 acres (1.2 to <4ha) (3 pts)  
☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)  
☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)  
☐ <0.1 acres (0.04ha) (0 pts)

2	4
max 14 pts.	subtotal

**Metric 2. Upland buffers and surrounding land use.**

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)  
☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)  
☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)  
☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)  
☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)  
☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)  
☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

16	20
max 30 pts.	subtotal

**Metric 3. Hydrology.**

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)  
☐ Other groundwater (3)  
☒ Precipitation (1)  
☒ Seasonal/Intermittent surface water (3)  
☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)  
☐ 0.4 to 0.7m (15.7 to 27.6in) (2)  
☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)  
☒ Recovered (7)  
☐ Recovering (3)  
☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)  
☐ Between stream/lake and other human use (1)  
☒ Part of wetland/upland (e.g. forest), complex (1)  
☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)  
☐ Regularly inundated/saturated (3)  
☒ Seasonally inundated (2)  
☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> ditch<br><input type="checkbox"/> tile<br><input type="checkbox"/> dike<br><input type="checkbox"/> weir<br><input type="checkbox"/> stormwater input | <input type="checkbox"/> point source (nonstormwater)<br><input type="checkbox"/> filling/grading<br><input type="checkbox"/> road bed/RR track<br><input type="checkbox"/> dredging<br><input type="checkbox"/> other _____ |
|---|--|

13	33
max 20 pts.	subtotal

**Metric 4. Habitat Alteration and Development.**

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)  
☒ Recovered (3)  
☐ Recovering (2)  
☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)  
☐ Very good (6)  
☐ Good (5)  
☒ Moderately good (4)  
☐ Fair (3)  
☐ Poor to fair (2)  
☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)  
☒ Recovered (6)  
☐ Recovering (3)  
☐ Recent or no recovery (1)

Check all disturbances observed

- |  |  |
|--|--|
| <input type="checkbox"/> mowing<br><input type="checkbox"/> grazing<br><input type="checkbox"/> clearcutting<br><input type="checkbox"/> selective cutting<br><input type="checkbox"/> woody debris removal<br><input type="checkbox"/> toxic pollutants | <input type="checkbox"/> shrub/sapling removal<br><input type="checkbox"/> herbaceous/aquatic bed removal<br><input checked="" type="checkbox"/> sedimentation<br><input checked="" type="checkbox"/> dredging<br><input type="checkbox"/> farming<br><input type="checkbox"/> nutrient enrichment |
|--|--|

33

subtotal this page

<b>Site:</b> WSJ-004	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/14/2023
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33

subtotal first page

0	33
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

8	41
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 2 Emergent
- ☐ 2 Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☒ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

41

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-005	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/14/2023
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0	0
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

1	1
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

12	13
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☒ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> ditch            | <input type="checkbox"/> point source (nonstormwater) |
| <input checked="" type="checkbox"/> tile  | <input checked="" type="checkbox"/> filling/grading   |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other _____                  |

6	19
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☒ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> mowing               | <input checked="" type="checkbox"/> shrub/sapling removal |
| <input type="checkbox"/> grazing              | <input type="checkbox"/> herbaceous/aquatic bed removal   |
| <input type="checkbox"/> clearcutting         | <input type="checkbox"/> sedimentation                    |
| <input type="checkbox"/> selective cutting    | <input type="checkbox"/> dredging                         |
| <input type="checkbox"/> woody debris removal | <input checked="" type="checkbox"/> farming               |
| <input type="checkbox"/> toxic pollutants     | <input type="checkbox"/> nutrient enrichment              |

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subtotal this page

<b>Site:</b> WSJ-005	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/14/2023
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19

subtotal first page

0	19
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

-2	17
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 1 Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☒ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

17

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-006	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/15/2023
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<b>3</b>	<b>3</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☒ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>5</b>	<b>8</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>21</b>	<b>29</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☒ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☒ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☒ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> ditch            | <input type="checkbox"/> point source (nonstormwater) |
| <input checked="" type="checkbox"/> tile  | <input type="checkbox"/> filling/grading              |
| <input type="checkbox"/> dike             | <input type="checkbox"/> road bed/RR track            |
| <input type="checkbox"/> weir             | <input type="checkbox"/> dredging                     |
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> other _____                  |

<b>16.5</b>	<b>45.5</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☒ None or none apparent (4)
- ☐ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☒ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☒ None or none apparent (9)
- ☒ Recovered (6)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- |   |   |
|---|---|
| <input type="checkbox"/> mowing               | <input type="checkbox"/> shrub/sapling removal          |
| <input type="checkbox"/> grazing              | <input type="checkbox"/> herbaceous/aquatic bed removal |
| <input type="checkbox"/> clearcutting         | <input type="checkbox"/> sedimentation                  |
| <input type="checkbox"/> selective cutting    | <input type="checkbox"/> dredging                       |
| <input type="checkbox"/> woody debris removal | <input checked="" type="checkbox"/> farming             |
| <input type="checkbox"/> toxic pollutants     | <input type="checkbox"/> nutrient enrichment            |

**45.5**

subtotal this page

<b>Site:</b> WSJ-006	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/15/2023
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45.5

subtotal first page

0	45.5
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

7	52.5
---	------

max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 2 Emergent
- ☐ Shrub
- ☐ 2 Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☒ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 2 Coarse woody debris >15cm (6in)
- ☐ 1 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

52.5

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-007	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/15/2023
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<b>1</b>	<b>1</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>5</b>	<b>6</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>23.5</b>	<b>29.5</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☒ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☒ None or none apparent (12)
- ☒ Recovered (7)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☒ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☒ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>18</b>	<b>47.5</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☒ None or none apparent (4)
- ☐ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☒ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☒ None or none apparent (9)
- ☐ Recovered (6)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>47.5</b>
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subtotal this page

<b>Site:</b> WSJ-007	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/15/2023
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47.5

subtotal first page

0	47.5
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

5	52.5
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☒ 2 Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☒ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☒ 1 Vegetated hummocks/tussocks
- ☒ 2 Coarse woody debris >15cm (6in)
- ☒ 1 Standing dead >25cm (10in) dbh
- ☒ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

52.5

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-008	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/15/2023
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<b>2</b>	<b>2</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>9</b>	<b>11</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☒ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☒ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☐ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>10</b>	<b>21</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☒ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch	<input type="checkbox"/> point source (nonstormwater)
<input type="checkbox"/> tile	<input type="checkbox"/> filling/grading
<input type="checkbox"/> dike	<input type="checkbox"/> road bed/RR track
<input type="checkbox"/> weir	<input type="checkbox"/> dredging
<input type="checkbox"/> stormwater input	<input type="checkbox"/> other _____

<b>10.5</b>	<b>31.5</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> mowing	<input checked="" type="checkbox"/> shrub/sapling removal
<input type="checkbox"/> grazing	<input type="checkbox"/> herbaceous/aquatic bed removal
<input type="checkbox"/> clearcutting	<input type="checkbox"/> sedimentation
<input checked="" type="checkbox"/> selective cutting	<input type="checkbox"/> dredging
<input checked="" type="checkbox"/> woody debris removal	<input type="checkbox"/> farming
<input type="checkbox"/> toxic pollutants	<input type="checkbox"/> nutrient enrichment

<b>31.5</b>
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subtotal this page

<b>Site:</b> WSJ-008	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/15/2023
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31.5

subtotal first page

0	31.5
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

6	37.5
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ Emergent
- ☐ Shrub
- ☒ 2 Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 1 Coarse woody debris >15cm (6in)
- ☐ 1 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

37.5

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-009	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/28/2023
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<b>2</b>	<b>2</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>3</b>	<b>5</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>14</b>	<b>19</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☒ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>8</b>	<b>27</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☒ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input checked="" type="checkbox"/> sedimentation <input checked="" type="checkbox"/> dredging <input type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>27</b>
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subtotal this page

<b>Site:</b> WSJ-009	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/28/2023
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27

subtotal first page

0	27
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

-3	24
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☒ 1 Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☒ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

24

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-010	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/29/2023
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<b>1</b>	<b>1</b>
max 6 pts.	subtotal

**Metric 1. Wetland Area (size).**

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>5</b>	<b>6</b>
max 14 pts.	subtotal

**Metric 2. Upland buffers and surrounding land use.**

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☒ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☐ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>15</b>	<b>21</b>
max 30 pts.	subtotal

**Metric 3. Hydrology.**

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☒ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☒ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

<b>Check all disturbances observed</b>	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>9</b>	<b>30</b>
max 20 pts.	subtotal

**Metric 4. Habitat Alteration and Development.**

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

<b>Check all disturbances observed</b>	
<input checked="" type="checkbox"/> mowing <input checked="" type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>30</b>
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subtotal this page

<b>Site:</b> WSJ-010	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/29/2023
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30

subtotal first page

0	30
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

2	32
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 1 Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☒ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

32

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-011	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/29/2023
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<b>2</b>	<b>2</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>1</b>	<b>3</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>16</b>	<b>19</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☒ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input checked="" type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>8</b>	<b>27</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☒ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input checked="" type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>27</b>
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subtotal this page

<b>Site:</b> WSJ-011	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/29/2023
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27

subtotal first page

0	27
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max 10 pts.

subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

-3	24
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max 20 pts.

subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 1 Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☒ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

24	<b>GRAND TOTAL (max 100 pts)</b>
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<b>Site:</b> WSJ-012	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/29/2023
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<b>0</b>	<b>0</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

<b>1</b>	<b>1</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>11</b>	<b>12</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>12</b>	<b>24</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>24</b>
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subtotal this page

<b>Site:</b> WSJ-012	<b>Rater(s):</b> S. Jennings/ H.Saxena	<b>Date:</b> 6/29/2023
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24

subtotal first page

0	24
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

3	27
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ Aquatic bed
- ☐ 1 Emergent
- ☐ Shrub
- ☐ Forest
- ☐ Mudflats
- ☐ Open water
- ☐ Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☒ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 1 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

27

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-017	<b>Rater(s):</b> S.Jennings/ H.Saxena	<b>Date:</b> 10/17/23
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<b>1</b>	<b>1</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>1</b>	<b>2</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>6</b>	<b>8</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input checked="" type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input checked="" type="checkbox"/> other <u>Agricultural Disturbances</u>

<b>6</b>	<b>14</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☒ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>14</b>
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subtotal this page

<b>Site:</b> WSJ-017	<b>Rater(s):</b> S.Jennings/ H.Saxena	<b>Date:</b> 10/17/23
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subtotal first page

0	14
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

2	16
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ 0 Aquatic bed
- ☐ 1 Emergent
- ☐ 0 Shrub
- ☐ 0 Forest
- ☐ 0 Mudflats
- ☐ 0 Open water
- ☐ 0 Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☒ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☒ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

16

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-018	<b>Rater(s):</b> S.Jennings/ H.Saxena	<b>Date:</b> 10/17/23
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<b>1</b>	<b>1</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>4</b>	<b>5</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☐ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>17</b>	<b>22</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☒ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☒ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input checked="" type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input checked="" type="checkbox"/> other <u>Agricultural Disturbances</u>

<b>12</b>	<b>34</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☒ Fair (3)
- ☐ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input checked="" type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input checked="" type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>34</b>
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<b>Site:</b> WSJ-018	<b>Rater(s):</b> S.Jennings/ H.Saxena	<b>Date:</b> 10/17/23
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34

subtotal first page

0	34
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

-1	33
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ 0 Aquatic bed
- ☐ 1 Emergent
- ☐ 0 Shrub
- ☐ 0 Forest
- ☐ 0 Mudflats
- ☐ 0 Open water
- ☐ 0 Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

33

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-019	<b>Rater(s):</b> S.Jennings/ H.Saxena	<b>Date:</b> 10/17/23
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<b>1</b>	<b>1</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☒ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>1</b>	<b>2</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>7</b>	<b>9</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☒ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☐ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input checked="" type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input checked="" type="checkbox"/> other <u>Agricultural Disturbances</u>

<b>6</b>	<b>15</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☐ Poor to fair (2)
- ☒ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input checked="" type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>15</b>
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<b>Site:</b> WSJ-019	<b>Rater(s):</b> S.Jennings/ H.Saxena	<b>Date:</b> 10/17/23
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subtotal first page

0	15
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

-4	11
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ 0 Aquatic bed
- ☐ 1 Emergent
- ☐ 0 Shrub
- ☐ 0 Forest
- ☐ 0 Mudflats
- ☐ 0 Open water
- ☐ 0 Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☐ Low (1)
- ☒ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☒ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

11

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-020	<b>Rater(s):</b> S.Jennings/ H.Saxena	<b>Date:</b> 10/17/23
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<b>2</b>	<b>2</b>
max 6 pts.	subtotal

### Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<b>1</b>	<b>3</b>
max 14 pts.	subtotal

### Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>13</b>	<b>16</b>
max 30 pts.	subtotal

### Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☒ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☒ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☒ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input checked="" type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input checked="" type="checkbox"/> filling/grading <input type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input checked="" type="checkbox"/> other <u>Agricultural Disturbances</u>

<b>7</b>	<b>23</b>
max 20 pts.	subtotal

### Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☐ Recovered (3)
- ☒ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☒ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☐ Recovered (6)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input type="checkbox"/> selective cutting <input type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input checked="" type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>23</b>
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subtotal this page

<b>Site:</b> WSJ-020	<b>Rater(s):</b> S.Jennings/ H.Saxena	<b>Date:</b> 10/17/23
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23

subtotal first page

0	23
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

-3	20
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ 0 Aquatic bed
- ☐ 1 Emergent
- ☐ 0 Shrub
- ☐ 0 Forest
- ☐ 0 Mudflats
- ☐ 0 Open water
- ☐ 0 Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☐ Moderately low (2)
- ☒ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☒ Extensive >75% cover (-5)
- ☐ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

20

**GRAND TOTAL (max 100 pts)**



<b>Site:</b> WSJ-021	<b>Rater(s):</b> S.Jennings/ H.Saxena	<b>Date:</b> 10/18/23
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<b>0</b>	<b>0</b>
max 6 pts.	subtotal

**Metric 1. Wetland Area (size).**

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- ☐ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☒ <0.1 acres (0.04ha) (0 pts)

<b>5</b>	<b>5</b>
max 14 pts.	subtotal

**Metric 2. Upland buffers and surrounding land use.**

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- ☒ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☐ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☒ LOW. Old field (>10 years), shrubland, young second growth forest. (5)
- ☒ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☐ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<b>8</b>	<b>13</b>
max 30 pts.	subtotal

**Metric 3. Hydrology.**

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- ☒ Precipitation (1)
- ☐ Seasonal/Intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- ☐ Recovered (7)
- ☒ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- ☐ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☒ Part of riparian or upland corridor (1)

3d. Duration inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- ☐ Regularly inundated/saturated (3)
- ☒ Seasonally inundated (2)
- ☐ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> ditch <input type="checkbox"/> tile <input type="checkbox"/> dike <input type="checkbox"/> weir <input checked="" type="checkbox"/> stormwater input	<input type="checkbox"/> point source (nonstormwater) <input checked="" type="checkbox"/> filling/grading <input checked="" type="checkbox"/> road bed/RR track <input type="checkbox"/> dredging <input type="checkbox"/> other _____

<b>11</b>	<b>24</b>
max 20 pts.	subtotal

**Metric 4. Habitat Alteration and Development.**

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- ☒ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- ☒ Recovered (6)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed	
<input checked="" type="checkbox"/> mowing <input type="checkbox"/> grazing <input type="checkbox"/> clearcutting <input checked="" type="checkbox"/> selective cutting <input checked="" type="checkbox"/> woody debris removal <input type="checkbox"/> toxic pollutants	<input type="checkbox"/> shrub/sapling removal <input type="checkbox"/> herbaceous/aquatic bed removal <input type="checkbox"/> sedimentation <input type="checkbox"/> dredging <input type="checkbox"/> farming <input type="checkbox"/> nutrient enrichment

<b>24</b>
subtotal this page

<b>Site:</b> WSJ-021	<b>Rater(s):</b> S.Jennings/ H.Saxena	<b>Date:</b> 10/18/23
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24

subtotal first page

0	24
max 10 pts.	subtotal

## Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- ☐ Bog (10)
- ☐ Fen (10)
- ☐ Old growth forest (10)
- ☐ Mature forested wetland (5)
- ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
- ☐ Lake Plain Sand Prairies (Oak Openings) (10)
- ☐ Relict Wet Prairies (10)
- ☐ Known occurrence state/federal threatened or endangered species (10)
- ☐ Significant migratory songbird/water fowl habitat or usage (10)
- ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

0	24
max 20 pts.	subtotal

## Metric 6. Plant communities, interspersions, microtopography.

6a. Wetland Vegetation Communities.

Score all present using 0 to 3 scale.

- ☐ 0 Aquatic bed
- ☐ 1 Emergent
- ☐ 0 Shrub
- ☐ 0 Forest
- ☐ 0 Mudflats
- ☐ 0 Open water
- ☐ 0 Other \_\_\_\_\_

6b. horizontal (plan view) Interspersion.

Select only one.

- ☐ High (5)
- ☐ Moderately high(4)
- ☐ Moderate (3)
- ☒ Moderately low (2)
- ☐ Low (1)
- ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- ☐ Extensive >75% cover (-5)
- ☒ Moderate 25-75% cover (-3)
- ☐ Sparse 5-25% cover (-1)
- ☐ Nearly absent <5% cover (0)
- ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- ☐ 0 Vegetated hummocks/tussocks
- ☐ 0 Coarse woody debris >15cm (6in)
- ☐ 0 Standing dead >25cm (10in) dbh
- ☐ 0 Amphibian breeding pools

### Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

### Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

### Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

### Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

24

**GRAND TOTAL (max 100 pts)**



# Appendix D

## OEPA Primary Headwater Habitat Evaluation Forms

SITE NAME/LOCATION SAG-001 UNT to Goose Creek

SITE NUMBER SAG-001 RIVER BASIN Great Miami RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) 0.54

LENGTH OF STREAM REACH (ft) 50 LAT 39.836180°N LONG 84.620663°W RIVER MILE \_\_\_\_\_

DATE 6-12-23 SCORER AG COMMENTS \_\_\_\_\_

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> <input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> SILT [3 pt]	15
<input type="checkbox"/> <input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	5
<input type="checkbox"/> <input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> FINE DETRITUS [3 pts]	5
<input type="checkbox"/> <input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	5	<input type="checkbox"/> <input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input type="checkbox"/> <input checked="" type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	40	<input type="checkbox"/> <input type="checkbox"/> MUCK [0 pts]	_____
<input type="checkbox"/> <input checked="" type="checkbox"/> SAND (<2 mm) [6 pts]	50	<input type="checkbox"/> <input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of  
Bldr Slabs, Boulder, Cobble, Bedrock 5

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) **15** TOTAL NUMBER OF SUBSTRATE TYPES: (B) **6**

**HHEI  
Metric  
Points**

Substrate  
Max = 40

21

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input checked="" type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

COMMENTS \_\_\_\_\_ MAXIMUM POOL DEPTH (centimeters): **15**

Pool Depth  
Max = 30

25

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) **1.25**

Bankfull  
Width  
Max=30

15

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/> <input type="checkbox"/> Wide >10m	<input type="checkbox"/> <input type="checkbox"/> Mature Forest, Wetland	<input type="checkbox"/> <input type="checkbox"/> Conservation Tillage	
<input type="checkbox"/> <input type="checkbox"/> Moderate 5-10m	<input type="checkbox"/> <input type="checkbox"/> Immature Forest, Shrub or Old Field	<input type="checkbox"/> <input type="checkbox"/> Urban or Industrial	
<input type="checkbox"/> <input type="checkbox"/> Narrow <5m	<input type="checkbox"/> <input type="checkbox"/> Residential, Park, New Field	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Open Pasture, Row Crop	
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> None	<input type="checkbox"/> <input type="checkbox"/> Fenced Pasture	<input type="checkbox"/> <input type="checkbox"/> Mining or Construction	

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input checked="" type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input checked="" type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

<input type="checkbox"/> Flat (0.5 ft/100 ft)	<input checked="" type="checkbox"/> Flat to Moderate	<input type="checkbox"/> Moderate (2 ft/100 ft)	<input type="checkbox"/> Moderate to Severe	<input type="checkbox"/> Severe (10 ft/100 ft)
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**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Goose Creek Distance from Evaluated Stream 0.5  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: Lewisburg NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Monroe

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): N Date of last precipitation: 6/12/23 Quantity: ~0.4  
Photo-documentation Notes: Y  
Elevated Turbidity? (Y/N): N Canopy (% open): 100  
Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) N Dissolved Oxygen (mg/l) \_\_\_\_\_ pH (S.U.) 7.53 Conductivity (umhos/cm) \_\_\_\_\_  
Is the sampling reach representative of the stream (Y/N) Y If not, explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: \_\_\_\_\_

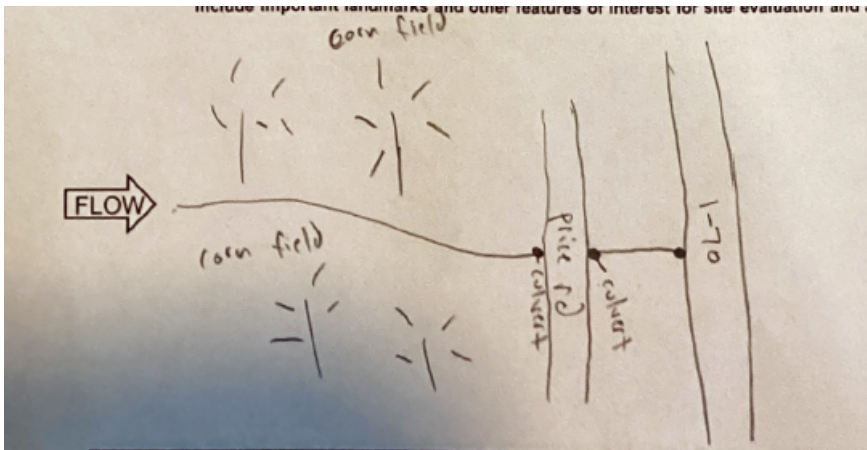
**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SAG-005 UNT to Dry Fork

SITE NUMBER SAG-005 RIVER BASIN Great Miami RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) .017

LENGTH OF STREAM REACH (ft) 100 LAT 39.886167°N LONG 84.614666°W RIVER MILE \_\_\_\_\_

DATE 6/13/2023 SCORER AG/HS COMMENTS \_\_\_\_\_

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input checked="" type="checkbox"/> SILT [3 pts]	25
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	_____
<input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> FINE DETRITUS [3 pts]	20
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	10	<input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	5	<input checked="" type="checkbox"/> MUCK [0 pts]	40
<input type="checkbox"/> SAND (<2 mm) [6 pts]	_____	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of  
Bldr Slabs, Boulder, Cobble, Bedrock 15

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) 3 (B) 5

**HHEI  
Metric  
Points**

Substrate  
Max = 40

8

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input checked="" type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

COMMENTS \_\_\_\_\_ MAXIMUM POOL DEPTH (centimeters): 25

Pool Depth  
Max = 30

30

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input checked="" type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) 1.75

Bankfull  
Width  
Max=30

20

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input checked="" type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input checked="" type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

☒ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Dry Fork Distance from Evaluated Stream 0 ft  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: Arcanum NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Monroe

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): Y Date of last precipitation: 6/13 Quantity: ~0.5"  
Photo-documentation Notes: \_\_\_\_\_  
Elevated Turbidity? (Y/N): N Canopy (% open): 70  
Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) \_\_\_\_\_ Dissolved Oxygen (mg/l) \_\_\_\_\_ pH (S.U.) 8.1 Conductivity (umhos/cm) \_\_\_\_\_  
Is the sampling reach representative of the stream (Y/N) Y If not, explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: \_\_\_\_\_

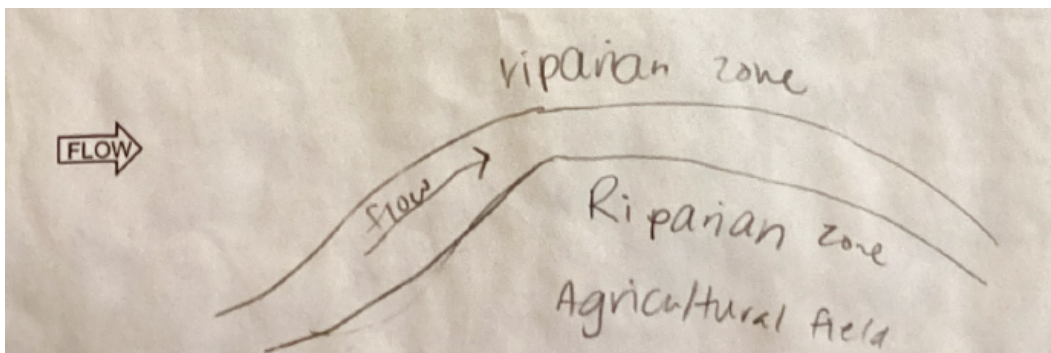
**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SAG-008 UNT to Bantas Fork

SITE NUMBER SAG-008 RIVER BASIN Great Miami RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) 0.62

LENGTH OF STREAM REACH (ft) 100 LAT 39.828020°N LONG 84.678029°W RIVER MILE \_\_\_\_\_

DATE 6/14/2023 SCORER HS/AG COMMENTS \_\_\_\_\_

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input type="checkbox"/> SILT [3 pt]	10
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	_____
<input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> FINE DETRITUS [3 pts]	_____
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	10	<input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input checked="" type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	50	<input type="checkbox"/> MUCK [0 pts]	_____
<input checked="" type="checkbox"/> SAND (<2 mm) [6 pts]	30	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of  
Bldr Slabs, Boulder, Cobble, Bedrock 10

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) **15** (B) **4**

**HHEI  
Metric  
Points**

Substrate  
Max = 40

**19**

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input checked="" type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

COMMENTS \_\_\_\_\_ MAXIMUM POOL DEPTH (centimeters): **30**

Pool Depth  
Max = 30

**20**

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input checked="" type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) **2**

Bankfull  
Width  
Max=30

**20**

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Mature Forest, Wetland	<input type="checkbox"/> Conservation Tillage
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Immature Forest, Shrub or Old Field	<input type="checkbox"/> Urban or Industrial
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Residential, Park, New Field	<input checked="" type="checkbox"/> Open Pasture, Row Crop
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Fenced Pasture	<input type="checkbox"/> Mining or Construction

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input checked="" type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input checked="" type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

☒ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☐ WWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☒ EWH Name: Bantas Fork Distance from Evaluated Stream 0 ft

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: Eaton North NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Monroe

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): Y Date of last precipitation: 6/12 Quantity: 0.4

Photo-documentation Notes: \_\_\_\_\_

Elevated Turbidity? (Y/N): \_\_\_\_\_ Canopy (% open): \_\_\_\_\_

Were samples collected for water chemistry? (Y/N): \_\_\_\_\_ Lab Sample # or ID (attach results): \_\_\_\_\_

Field Measures: Temp (°C) \_\_\_\_\_ Dissolved Oxygen (mg/l) \_\_\_\_\_ pH (S.U.) 7.6 Conductivity (umhos/cm) \_\_\_\_\_

Is the sampling reach representative of the stream (Y/N) \_\_\_\_\_ If not, explain: \_\_\_\_\_

Additional comments/description of pollution impacts: \_\_\_\_\_

**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

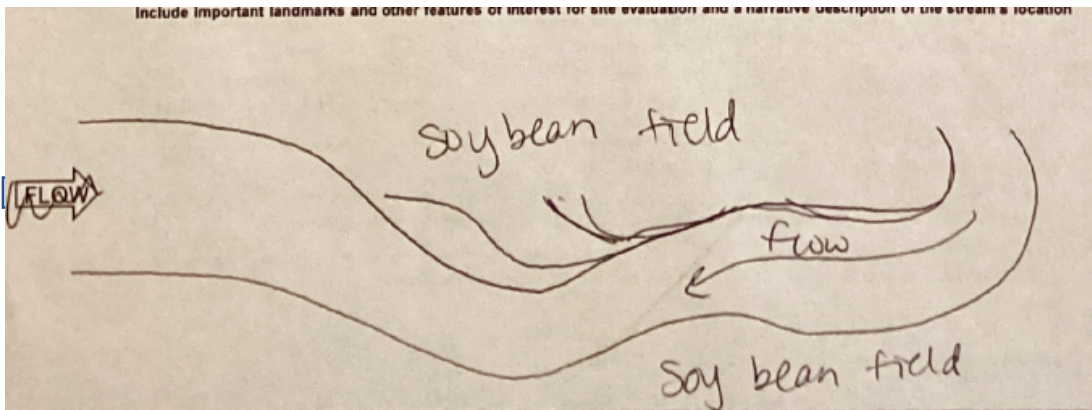
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SAG-010 UNT to Sevensmile Creek

SITE NUMBER SAG-010 RIVER BASIN Great Miami RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) 0.04

LENGTH OF STREAM REACH (ft) 50 LAT 39.833191°N LONG 84.720357°W RIVER MILE \_\_\_\_\_

DATE 6/14/2023 SCORER HS/AG COMMENTS \_\_\_\_\_

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☐ NONE / NATURAL CHANNEL ☒ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input type="checkbox"/> SILT [3 pt]	10
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	_____
<input type="checkbox"/> BEDROCK [16 pts]	_____	<input checked="" type="checkbox"/> FINE DETRITUS [3 pts]	20
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	_____	<input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	10	<input type="checkbox"/> MUCK [0 pts]	_____
<input checked="" type="checkbox"/> SAND (<2 mm) [6 pts]	60	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of  
Bldr Slabs, Boulder, Cobble, Bedrock 0

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) 9 (B) 4

**HHEI  
Metric  
Points**

Substrate  
Max = 40

13

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input checked="" type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

COMMENTS \_\_\_\_\_ MAXIMUM POOL DEPTH (centimeters): 25

Pool Depth  
Max = 30

30

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input checked="" type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) 1.75

Bankfull  
Width  
Max=30

20

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/>	<input type="checkbox"/> Wide >10m	<input type="checkbox"/>	<input type="checkbox"/> Mature Forest, Wetland
<input type="checkbox"/>	<input type="checkbox"/> Moderate 5-10m	<input type="checkbox"/>	<input type="checkbox"/> Immature Forest, Shrub or Old Field
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Narrow <5m	<input type="checkbox"/>	<input checked="" type="checkbox"/> Residential, Park, New Field
<input type="checkbox"/>	<input type="checkbox"/> None	<input type="checkbox"/>	<input type="checkbox"/> Fenced Pasture
		<input type="checkbox"/>	<input type="checkbox"/> Conservation Tillage
		<input type="checkbox"/>	<input checked="" type="checkbox"/> Urban or Industrial
		<input checked="" type="checkbox"/>	<input type="checkbox"/> Open Pasture, Row Crop
		<input type="checkbox"/>	<input type="checkbox"/> Mining or Construction

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input checked="" type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input checked="" type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

☒ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Sevenmile Creek Distance from Evaluated Stream 0.5 mi  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: Eaton North NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Jefferson

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): Y Date of last precipitation: 6-13-23 Quantity: 0.2  
Photo-documentation Notes: \_\_\_\_\_  
Elevated Turbidity? (Y/N): N Canopy (% open): 100  
Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) \_\_\_\_\_ Dissolved Oxygen (mg/l) \_\_\_\_\_ pH (S.U.) 7.25 Conductivity (umhos/cm) \_\_\_\_\_  
Is the sampling reach representative of the stream (Y/N) \_\_\_\_\_ If not, explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: \_\_\_\_\_

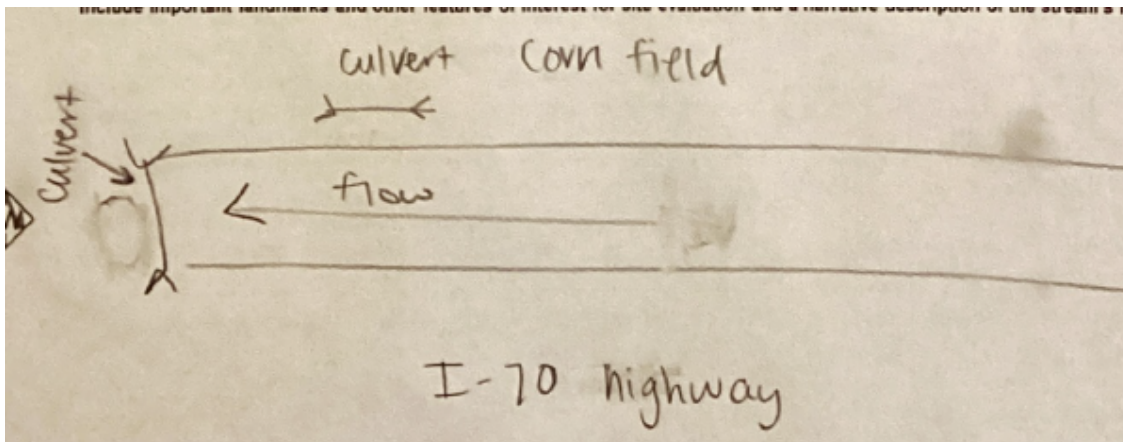
**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SAG-011 UNT to Elkhorn Creek

SITE NUMBER SAG-011 RIVER BASIN Great Miami RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) <0.01

LENGTH OF STREAM REACH (ft) 50 LAT 39.827165°N LONG 84.747299°W RIVER MILE \_\_\_\_\_

DATE 6-15-23 SCORER HS/AG COMMENTS \_\_\_\_\_

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> <input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> SILT [3 pt]	20 _____
<input type="checkbox"/> <input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	_____
<input type="checkbox"/> <input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> FINE DETRITUS [3 pts]	_____
<input type="checkbox"/> <input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input checked="" type="checkbox"/> <input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	30	<input type="checkbox"/> <input type="checkbox"/> MUCK [0 pts]	_____
<input checked="" type="checkbox"/> <input type="checkbox"/> SAND (<2 mm) [6 pts]	50	<input type="checkbox"/> <input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of  
Bldr Slabs, Boulder, Cobble, Bedrock \_\_\_\_\_

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) **15** (B) **3**

**HHEI  
Metric  
Points**

Substrate  
Max = 40

**18**

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input checked="" type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

Pool Depth  
Max = 30

**0**

COMMENTS \_\_\_\_\_ MAXIMUM POOL DEPTH (centimeters): \_\_\_\_\_

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input checked="" type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

Bankfull  
Width  
Max=30

**5**

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) **5**

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/> <input type="checkbox"/> Wide >10m		<input type="checkbox"/> <input type="checkbox"/> Mature Forest, Wetland	<input type="checkbox"/> <input type="checkbox"/> Conservation Tillage
<input type="checkbox"/> <input type="checkbox"/> Moderate 5-10m		<input type="checkbox"/> <input type="checkbox"/> Immature Forest, Shrub or Old Field	<input checked="" type="checkbox"/> <input type="checkbox"/> Urban or Industrial
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Narrow <5m		<input type="checkbox"/> <input type="checkbox"/> Residential, Park, New Field	<input type="checkbox"/> <input checked="" type="checkbox"/> Open Pasture, Row Crop
<input type="checkbox"/> <input type="checkbox"/> None		<input type="checkbox"/> <input type="checkbox"/> Fenced Pasture	<input type="checkbox"/> <input type="checkbox"/> Mining or Construction

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input checked="" type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input checked="" type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

☒ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Elkhorn Creek Distance from Evaluated Stream 0.50 mi  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: New Paris NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Jackson

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): y Date of last precipitation: 6-13-23 Quantity: 0.25"  
Photo-documentation Notes: \_\_\_\_\_  
Elevated Turbidity? (Y/N): n Canopy (% open): 60  
Were samples collected for water chemistry? (Y/N): n Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) \_\_\_\_\_ Dissolved Oxygen (mg/l) \_\_\_\_\_ pH (S.U.) \_\_\_\_\_ Conductivity (umhos/cm) \_\_\_\_\_  
Is the sampling reach representative of the stream (Y/N) y If not, explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: \_\_\_\_\_

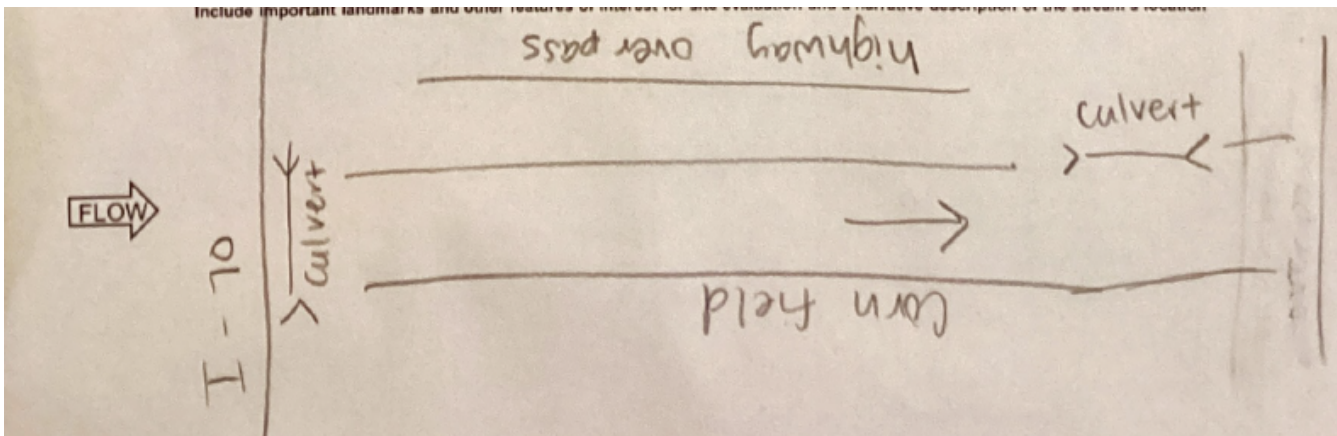
**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SAG-012 UNT to Elkhorn Creek

SITE NUMBER SAG-012 RIVER BASIN Whitewater RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) 0.07

LENGTH OF STREAM REACH (ft) \_\_\_\_\_ LAT 39.826152°N LONG 84.759170°W RIVER MILE \_\_\_\_\_

DATE 6-15-23 SCORER HS/AG COMMENTS \_\_\_\_\_

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☐ NONE / NATURAL CHANNEL ☒ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input checked="" type="checkbox"/> SILT [3 pt]	30
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	20
<input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> FINE DETRITUS [3 pts]	_____
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	_____	<input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	20	<input type="checkbox"/> MUCK [0 pts]	_____
<input checked="" type="checkbox"/> SAND (<2 mm) [6 pts]	40	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 0

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) 9 (B) 4

**HHEI Metric Points**

Substrate Max = 40

13

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input checked="" type="checkbox"/> 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

Pool Depth Max = 30

15

COMMENTS \_\_\_\_\_ MAXIMUM POOL DEPTH (centimeters): 10

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input checked="" type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

Bankfull Width Max=30

5

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) 0.5

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input type="checkbox"/> Stream Flowing	<input checked="" type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input checked="" type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

☒ Flat (0.5 ft/100 ft)
 ☐ Flat to Moderate
 ☐ Moderate (2 ft/100 ft)
 ☐ Moderate to Severe
 ☐ Severe (10 ft/100 ft)



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Elkhorn Creek Distance from Evaluated Stream 0.25 mi  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: New Paris NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Jackson

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): Y Date of last precipitation: 6-13-23 Quantity: 0.2"

Photo-documentation Notes: \_\_\_\_\_

Elevated Turbidity? (Y/N): N Canopy (% open): 10

Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): \_\_\_\_\_

Field Measures: Temp (°C) \_\_\_\_\_ Dissolved Oxygen (mg/l) \_\_\_\_\_ pH (S.U.) \_\_\_\_\_ Conductivity (umhos/cm) \_\_\_\_\_

Is the sampling reach representative of the stream (Y/N) \_\_\_\_\_ If not, explain: \_\_\_\_\_

Additional comments/description of pollution impacts: \_\_\_\_\_

**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

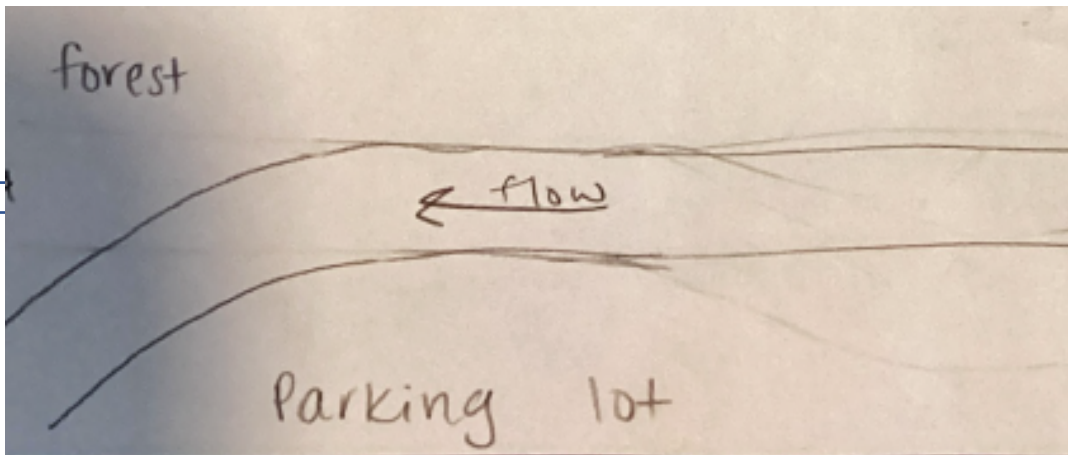
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_

Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SAG-013  
 SITE NUMBER SAG-013 RIVER BASIN Whitewater RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) \_\_\_\_\_  
 LENGTH OF STREAM REACH (ft) 50 LAT 39.818321 LONG -84.798930 RIVER MILE \_\_\_\_\_  
 DATE 10/17/23 SCORER A. Glenn COMMENTS \_\_\_\_\_

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input type="checkbox"/> SILT [3 pt]	15
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	5
<input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> FINE DETRITUS [3 pts]	10
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	20	<input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input checked="" type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	35	<input type="checkbox"/> MUCK [0 pts]	_____
<input type="checkbox"/> SAND (<2 mm) [6 pts]	15	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 20

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) **21** (B) **6**

**HHEI Metric Points**

Substrate Max = 40

27

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input checked="" type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

Pool Depth Max = 30

0

COMMENTS \_\_\_\_\_ MAXIMUM POOL DEPTH (centimeters): **0**

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

Bankfull Width Max=30

15

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) **1.25**

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input checked="" type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input checked="" type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

☐ Flat (0.5 ft/100 ft) ☒ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Elkhorn Creek Distance from Evaluated Stream 0.5 mi  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: New Paris NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Jackson

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): y Date of last precipitation: 10/14/23 Quantity: 0.20  
Photo-documentation Notes: \_\_\_\_\_  
Elevated Turbidity? (Y/N): n Canopy (% open): 0  
Were samples collected for water chemistry? (Y/N): n Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) \_\_\_\_\_ Dissolved Oxygen (mg/l) \_\_\_\_\_ pH (S.U.) \_\_\_\_\_ Conductivity (umhos/cm) \_\_\_\_\_  
Is the sampling reach representative of the stream (Y/N) y If not, explain: \_\_\_\_\_  
\_\_\_\_\_  
Additional comments/description of pollution impacts: \_\_\_\_\_  
\_\_\_\_\_

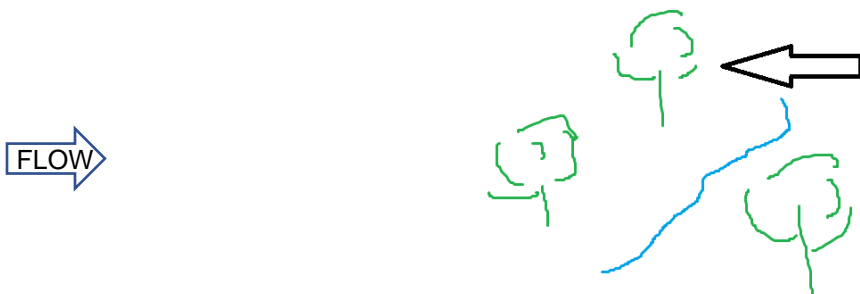
**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) n Species observed (if known): \_\_\_\_\_  
Frogs or Tadpoles Observed? (Y/N) n Species observed (if known): \_\_\_\_\_  
Salamanders Observed? (Y/N) n Species observed (if known): \_\_\_\_\_  
Aquatic Macroinvertebrates Observed? (Y/N) n Species observed (if known): \_\_\_\_\_  
Comments Regarding Biology: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SSJ-001 UNT 1 to Dry Run

SITE NUMBER SSJ-001 RIVER BASIN Lower Great Miami, Indiana, Ohio RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) 0.18

LENGTH OF STREAM REACH (ft) 200 LAT 39.87824 LONG -84.61470 RIVER MILE \_\_\_\_\_

DATE 6/12/2023 SCORER SJ COMMENTS \_\_\_\_\_

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☐ NONE / NATURAL CHANNEL ☒ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input checked="" type="checkbox"/> SILT [3 pt]	68
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	2	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	_____
<input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> FINE DETRITUS [3 pts]	_____
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	5	<input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	110	<input type="checkbox"/> MUCK [0 pts]	_____
<input checked="" type="checkbox"/> SAND (<2 mm) [6 pts]	15	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of  
Bldr Slabs, Boulder, Cobble, Bedrock 7

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) **9** (B) **5** TOTAL NUMBER OF SUBSTRATE TYPES: **5**

**HHEI  
Metric  
Points**

Substrate  
Max = 40

14

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input checked="" type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

Pool Depth  
Max = 30

25

COMMENTS \_\_\_\_\_ MAXIMUM POOL DEPTH (centimeters): **15**

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

Bankfull  
Width  
Max=30

15

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) **1.37**

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Mature Forest, Wetland	<input type="checkbox"/> Conservation Tillage
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Immature Forest, Shrub or Old Field	<input type="checkbox"/> Urban or Industrial
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Residential, Park, New Field	<input checked="" type="checkbox"/> Open Pasture, Row Crop
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Fenced Pasture	<input type="checkbox"/> Mining or Construction

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input checked="" type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input checked="" type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

☐ Flat (0.5 ft/100 ft) ☒ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Dry Run Distance from Evaluated Stream 0.28  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: Arcanum NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Monroe

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): N Date of last precipitation: 6/12/2023 Quantity: ~0.4  
Photo-documentation Notes: Y  
Elevated Turbidity? (Y/N): N Canopy (% open): 100  
Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) N Dissolved Oxygen (mg/l) \_\_\_\_\_ pH (S.U.) 7.85 Conductivity (umhos/cm) \_\_\_\_\_  
Is the sampling reach representative of the stream (Y/N) Y If not, explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: Receives Ag Field run-off

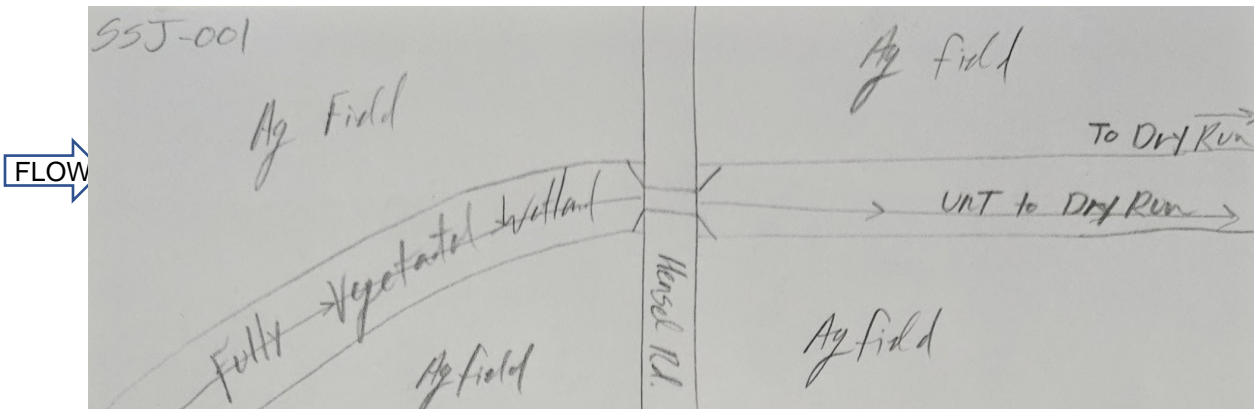
**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SSJ-002 UNT 2 to Dry Run

SITE NUMBER SSJ-002 RIVER BASIN Lower Great Miami, Indiana, Ohio RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) 0.69

LENGTH OF STREAM REACH (ft) 200 LAT 39.88517 LONG -84.61526 RIVER MILE \_\_\_\_\_

DATE 6/12/20223 SCORER SJ COMMENTS \_\_\_\_\_

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input type="checkbox"/> SILT [3 pt]	15
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	2	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	_____
<input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> FINE DETRITUS [3 pts]	_____
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	5	<input checked="" type="checkbox"/> CLAY or HARDPAN [0 pt]	20
<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	10	<input type="checkbox"/> MUCK [0 pts]	_____
<input checked="" type="checkbox"/> SAND (<2 mm) [6 pts]	25	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 7

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) **6** (B) **6**

**HHEI Metric Points**

Substrate Max = 40

12

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input checked="" type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

Pool Depth Max = 30

30

COMMENTS \_\_\_\_\_ MAXIMUM POOL DEPTH (centimeters): **22.8**

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

Bankfull Width Max=30

15

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) **1.13**

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input checked="" type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input checked="" type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

<input type="checkbox"/> Flat (0.5 ft/100 ft)	<input checked="" type="checkbox"/> Flat to Moderate	<input type="checkbox"/> Moderate (2 ft/100 ft)	<input type="checkbox"/> Moderate to Severe	<input type="checkbox"/> Severe (10 ft/100 ft)
---	--	---	---	--



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Dry Run Distance from Evaluated Stream 0.06 mi  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: Arcanum NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Monroe

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): N Date of last precipitation: 6/12/2023 Quantity: ~0.4  
Photo-documentation Notes: Y  
Elevated Turbidity? (Y/N): N Canopy (% open): 100  
Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) N Dissolved Oxygen (mg/l) N pH (S.U.) 7.95 Conductivity (umhos/cm) N  
Is the sampling reach representative of the stream (Y/N) Y If not, explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: Receives agricultural drainage

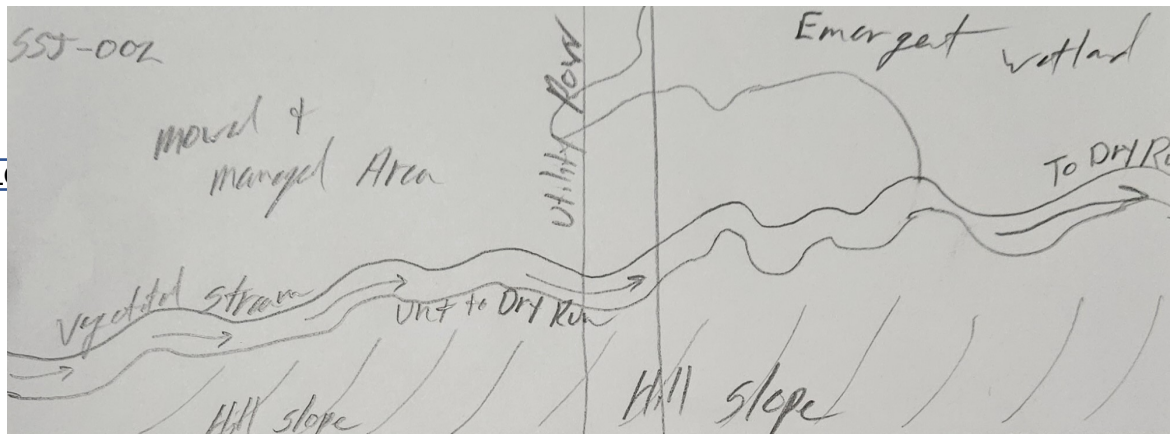
**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SSJ-004 UNT to Elkhorn Creek

SITE NUMBER SSJ-004 RIVER BASIN Lower Great Miami, Indiana, Ohio RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) 0.08

LENGTH OF STREAM REACH (ft) 200 LAT 39.8012 LONG -84.8065 RIVER MILE \_\_\_\_\_

DATE 6/15/20223 SCORER SJ COMMENTS ephemeral

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> <input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> SILT [3 pt]	_____
<input type="checkbox"/> <input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input checked="" type="checkbox"/> <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	<u>55</u>
<input type="checkbox"/> <input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> <input checked="" type="checkbox"/> FINE DETRITUS [3 pts]	<u>20</u>
<input type="checkbox"/> <input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input type="checkbox"/> <input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	<u>10</u>	<input type="checkbox"/> <input type="checkbox"/> MUCK [0 pts]	_____
<input type="checkbox"/> <input type="checkbox"/> SAND (<2 mm) [6 pts]	<u>15</u>	<input type="checkbox"/> <input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 0

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) 6 (B) 4

**HHEI Metric Points**

Substrate Max = 40

10

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input checked="" type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

Pool Depth Max = 30

0

COMMENTS Dry stream bed

MAXIMUM POOL DEPTH (centimeters): 0

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

Bankfull Width Max=30

15

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) 1.32

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Mature Forest, Wetland	<input type="checkbox"/> Conservation Tillage
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Immature Forest, Shrub or Old Field	<input type="checkbox"/> Urban or Industrial
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Residential, Park, New Field	<input type="checkbox"/> Open Pasture, Row Crop
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Fenced Pasture	<input type="checkbox"/> Mining or Construction

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input checked="" type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS Dry Stream bed at time of investigation

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input checked="" type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

☐ Flat (0.5 ft/100 ft) ☒ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Elkhorn Creek Distance from Evaluated Stream 1.01 mi  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: New Paris NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Jackson

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): N Date of last precipitation: 6/12/2023 Quantity: ~0.4  
Photo-documentation Notes: Y  
Elevated Turbidity? (Y/N): N Canopy (% open): 100  
Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) N Dissolved Oxygen (mg/l) N pH (S.U.) N/A Conductivity (umhos/cm) N  
Is the sampling reach representative of the stream (Y/N) Y If not, explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: \_\_\_\_\_

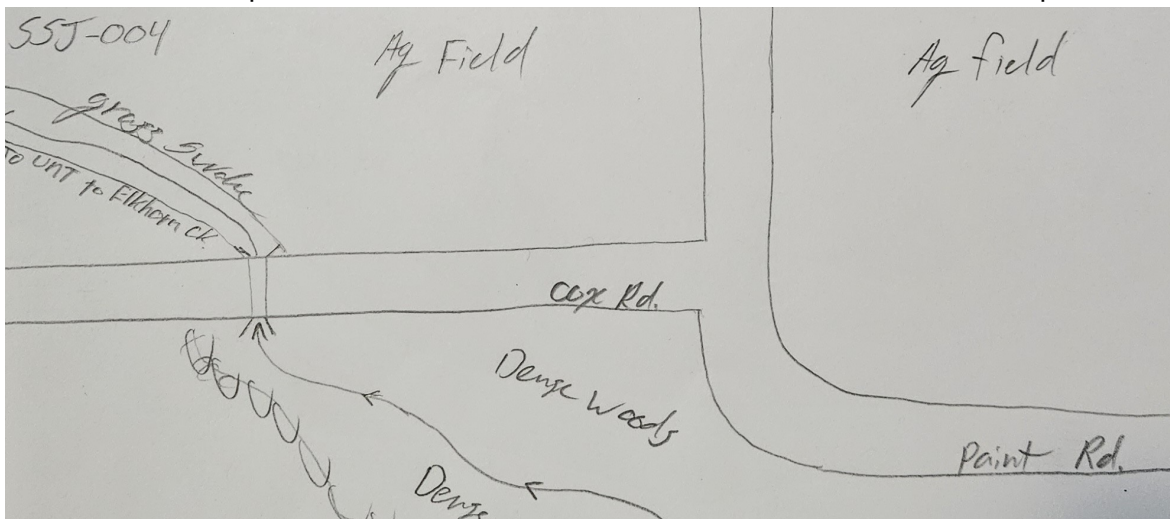
**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SSJ-005 UNT to Elkhorn Creek

SITE NUMBER SSJ-005 RIVER BASIN Lower Great Miami, Indiana, Ohio RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) 0.62

LENGTH OF STREAM REACH (ft) 200 LAT 39.81139 LONG -84.81048 RIVER MILE \_\_\_\_\_

DATE 6/16/20223 SCORER SJ COMMENTS Intermittent

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> <input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> SILT [3 pt]	_____
<input type="checkbox"/> <input type="checkbox"/> BOULDER (>256 mm) [16 pts]	<u>5</u>	<input type="checkbox"/> <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	<u>5</u>
<input type="checkbox"/> <input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> <input type="checkbox"/> FINE DETRITUS [3 pts]	_____
<input type="checkbox"/> <input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	<u>10</u>	<input type="checkbox"/> <input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input checked="" type="checkbox"/> <input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	<u>50</u>	<input type="checkbox"/> <input type="checkbox"/> MUCK [0 pts]	_____
<input type="checkbox"/> <input checked="" type="checkbox"/> SAND (<2 mm) [6 pts]	<u>20</u>	<input type="checkbox"/> <input type="checkbox"/> ARTIFICIAL [3 pts]	<u>10</u>

Total of Percentages of  
Bldr Slabs, Boulder, Cobble, Bedrock 15

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) **15** (B) **6**

**HHEI  
Metric  
Points**

Substrate  
Max = 40

21

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input checked="" type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

COMMENTS \_\_\_\_\_ MAXIMUM POOL DEPTH (centimeters): **20**

Pool Depth  
Max = 30

25

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input checked="" type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) **2.72**

Bankfull  
Width  
Max=30

20

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)			
L	R	L	R		
<input type="checkbox"/> <input type="checkbox"/>	Wide >10m	<input type="checkbox"/> <input type="checkbox"/>	Mature Forest, Wetland	<input type="checkbox"/> <input type="checkbox"/>	Conservation Tillage
<input type="checkbox"/> <input type="checkbox"/>	Moderate 5-10m	<input checked="" type="checkbox"/> <input type="checkbox"/>	Immature Forest, Shrub or Old Field	<input type="checkbox"/> <input type="checkbox"/>	Urban or Industrial
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Narrow <5m	<input type="checkbox"/> <input type="checkbox"/>	Residential, Park, New Field	<input type="checkbox"/> <input checked="" type="checkbox"/>	Open Pasture, Row Crop
<input type="checkbox"/> <input type="checkbox"/>	None	<input type="checkbox"/> <input type="checkbox"/>	Fenced Pasture	<input type="checkbox"/> <input type="checkbox"/>	Mining or Construction

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input checked="" type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS Flowing at time of assessment; Dry channel in Late Summer.

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input checked="" type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

<input type="checkbox"/> Flat (0.5 ft/100 ft)	<input checked="" type="checkbox"/> Flat to Moderate	<input type="checkbox"/> Moderate (2 ft/100 ft)	<input type="checkbox"/> Moderate to Severe	<input type="checkbox"/> Severe (10 ft/100 ft)
---	--	---	---	--



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Elkhorn Creek Distance from Evaluated Stream 0.7 mi  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: New Paris NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Jackson

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): N Date of last precipitation: 6/12/2023 Quantity: ~0.4  
Photo-documentation Notes: Y  
Elevated Turbidity? (Y/N): N Canopy (% open): 20%  
Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) N Dissolved Oxygen (mg/l) N pH (S.U.) 7.50 Conductivity (umhos/cm) N  
Is the sampling reach representative of the stream (Y/N) Y If not, explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: receives agricultural drainage; Bridge crossing

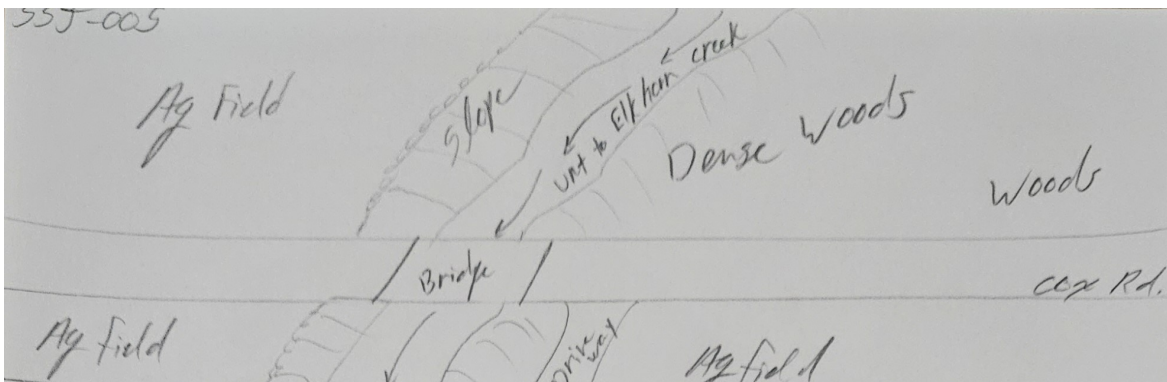
**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SSJ-006 UNT to Elkhorn Creek

SITE NUMBER SSJ-006 RIVER BASIN Lower Great Miami, Indiana, Ohio RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) 0.02

LENGTH OF STREAM REACH (ft) 200 LAT 39.8196 LONG -84.7490 RIVER MILE \_\_\_\_\_

DATE 6/12/20223 SCORER SJ COMMENTS ephemeral in wood lot

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☒ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check *ONLY* two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input type="checkbox"/> SILT [3 pt]	_____
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input checked="" type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	<u>55</u>
<input type="checkbox"/> BEDROCK [16 pts]	_____	<input checked="" type="checkbox"/> FINE DETRITUS [3 pts]	<u>25</u>
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	_____	<input type="checkbox"/> CLAY or HARDPAN [0 pt]	_____
<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	<u>20</u>	<input type="checkbox"/> MUCK [0 pts]	_____
<input type="checkbox"/> SAND (<2 mm) [6 pts]	_____	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 0

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) 6 (B) 3

**HHEI Metric Points**

Substrate Max = 40

9

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input checked="" type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

COMMENTS Dry Channel

MAXIMUM POOL DEPTH (centimeters): 0

Pool Depth Max = 30

0

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check *ONLY* one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

COMMENTS \_\_\_\_\_

AVERAGE BANKFULL WIDTH (meters) 1.31

Bankfull Width Max=30

15

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check *ONLY* one box):**

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (interstitial)	<input checked="" type="checkbox"/> Dry channel, no water (ephemeral)

COMMENTS Dry Channel at time of assessment

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):**

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input checked="" type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

☐ Flat (0.5 ft/100 ft)
 ☒ Flat to Moderate
 ☐ Moderate (2 ft/100 ft)
 ☐ Moderate to Severe
 ☐ Severe (10 ft/100 ft)



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Elkhorn Creek Distance from Evaluated Stream 0.15 mi  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: Eaton North NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Jefferson

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): N Date of last precipitation: 6/12/2023 Quantity: ~0.4  
Photo-documentation Notes: Y  
Elevated Turbidity? (Y/N): N Canopy (% open): 0%  
Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) N Dissolved Oxygen (mg/l) N pH (S.U.) N/A Conductivity (umhos/cm) N  
Is the sampling reach representative of the stream (Y/N) Y If not, explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: Receives roadside drainage

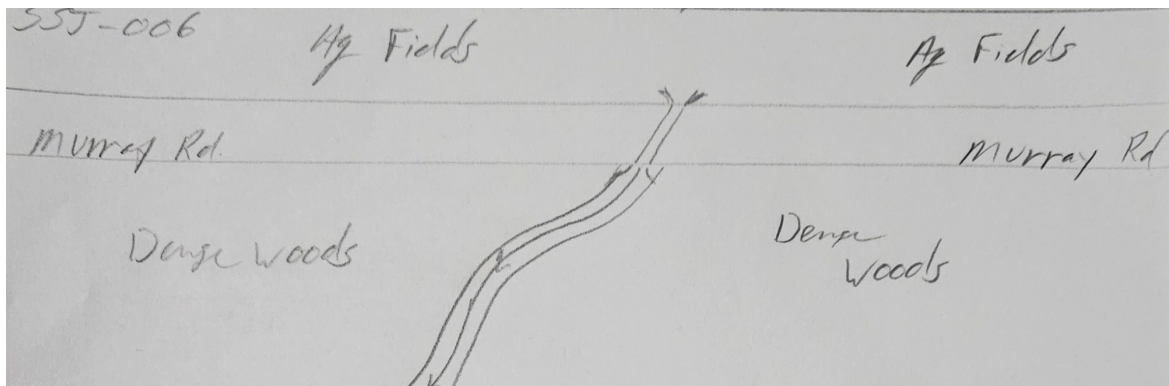
**BIOLOGICAL OBSERVATIONS**

(Record all observations below)

Fish Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Frogs or Tadpoles Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Salamanders Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Aquatic Macroinvertebrates Observed? (Y/N) N Species observed (if known): \_\_\_\_\_  
Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



SITE NAME/LOCATION SSJ-019 UNT to Elkhorn Creek

SITE NUMBER SSJ-019 RIVER BASIN Lower Great Miami, Indiana, Ohio RIVER CODE \_\_\_\_\_ DRAINAGE AREA (mi<sup>2</sup>) 0.37

LENGTH OF STREAM REACH (ft) 200 LAT 39.81200 LONG -84.78776 RIVER MILE \_\_\_\_\_

DATE 10/18/2023 SCORER SJ COMMENTS straight channel; Ag Drainage; ephemeral

**NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Instructions**

**STREAM CHANNEL MODIFICATIONS:** ☐ NONE / NATURAL CHANNEL ☒ RECOVERED ☐ RECOVERING ☐ RECENT OR NO RECOVERY

**1. SUBSTRATE (Estimate percent of every type present).** Check ONLY two predominant substrate *TYPE* boxes. (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input checked="" type="checkbox"/> SILT [3 pt]	20
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	_____
<input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> FINE DETRITUS [3 pts]	_____
<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	5	<input checked="" type="checkbox"/> CLAY or HARDPAN [0 pt]	50
<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	10	<input type="checkbox"/> MUCK [0 pts]	_____
<input type="checkbox"/> SAND (<2 mm) [6 pts]	15	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____

Total of Percentages of  
Bldr Slabs, Boulder, Cobble, Bedrock 5

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: (A) 3 (B) 5

**HHEI  
Metric  
Points**

Substrate  
Max = 40

8

A + B

**2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):**

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input checked="" type="checkbox"/> NO WATER OR MOIST CHANNEL [0pts]

Pool Depth  
Max = 30

0

COMMENTS Dry Channel at time of assessment

MAXIMUM POOL DEPTH (centimeters): 0

**3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box):**

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	

Bankfull  
Width  
Max=30

15

COMMENTS \_\_\_\_\_ AVERAGE BANKFULL WIDTH (meters) 1.21

**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ★ NOTE: River Left (L) and Right (R) as looking downstream ★

RIPARIAN WIDTH (Per Bank)		FLOODPLAIN QUALITY (Most Predominant per Bank)	
L	R	L	R
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Mature Forest, Wetland	<input type="checkbox"/> Conservation Tillage
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Immature Forest, Shrub or Old Field	<input type="checkbox"/> Urban or Industrial
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Residential, Park, New Field	<input checked="" type="checkbox"/> Open Pasture, Row Crop
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Fenced Pasture	<input type="checkbox"/> Mining or Construction
<input type="checkbox"/>	<input type="checkbox"/>		

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation) (Check ONLY one box):**

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COMMENTS \_\_\_\_\_

**SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):**

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**STREAM GRADIENT ESTIMATE**

☐ Flat (0.5 ft/100 ft) ☒ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)



**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** ☐ Yes ☒ No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI form)

**DOWNSTREAM DESIGNATED USE(S)**

☒ WWH Name: Elkhorn Creek Distance from Evaluated Stream 0.31 mi  
☐ CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
☐ EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.**

USGS Quadrangle Name: New Paris NRCS Soil Map Page: \_\_\_\_\_ NRCS Soil Map Stream Order: \_\_\_\_\_  
County: Preble Township/City: Jackson

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): Y Date of last precipitation: 10/14/2023 Quantity: ~0.33  
Photo-documentation Notes: Y  
Elevated Turbidity? (Y/N): N Canopy (% open): 100%  
Were samples collected for water chemistry? (Y/N): N Lab Sample # or ID (attach results): \_\_\_\_\_  
Field Measures: Temp (°C) N Dissolved Oxygen (mg/l) N pH (S.U.) N/A Conductivity (umhos/cm) N  
Is the sampling reach representative of the stream (Y/N) Y If not, explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: Receives Agricultural run-off

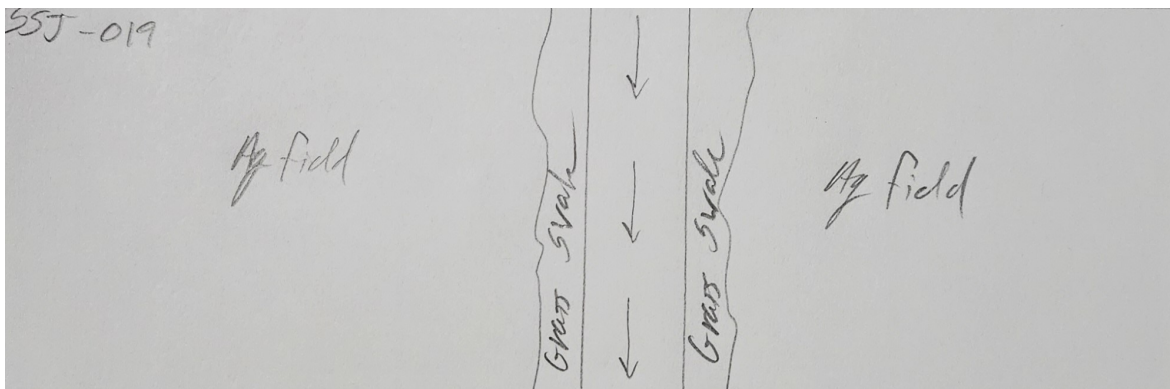
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Comments Regarding Biology: \_\_\_\_\_

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



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**This foregoing document was electronically filed with the Public Utilities  
Commission of Ohio Docketing Information System on**

**12/18/2023 3:50:48 PM**

**in**

**Case No(s). 22-0627-EL-BTX**

Summary: Application Application for a Certificate of Compatibility and Public Need for the West Manchester–Blazer–Hodgin 138kV Transmission Line Project (Part 6) electronically filed by Mr. Christopher C. Hollon on behalf of The Dayton Power and Light Company d/b/a AES Ohio.